

# COUNTY COUNCIL OF FIFE



INSTITUTE OF SOCIAL  
MEDICINE

10, PARKS ROAD,  
OXFORD

# ANNUAL REPORT

ON THE

HEALTH AND SANITARY CONDITION  
OF THE COUNTY AND DISTRICTS

DURING

**1946**

CUPAR-FIFE :  
J. & G. INNES, LTD.  
(C32111)



# CONTENTS.

Section.	Foreword.	Page
<b>1. Vital Statistics—</b>		
Population ... ..		1
Births... ..		2
Marriages ... ..		2
Deaths ... ..		3
Infant Mortality ... ..		6
Maternal Mortality ... ..		7
<b>2. Maternity and Child Welfare Service—</b>		
Maternity Services Scheme ... ..		9
Midwives (Scotland) Acts ... ..		9
Maternity Hospitals ... ..		12
Home Visitations ... ..		13
Infant Protection ... ..		15
Maternity and Child Welfare Centres ... ..		15
Ante-Natal Clinics ... ..		17
Ultra Violet Radiation ... ..		21
Radiological Scheme ... ..		22
<b>3. Home Help Scheme ... ..</b>		<b>22</b>
<b>4. School Medical Services—</b>		
No. of Schools and Children on Register ... ..		23
School Buildings ... ..		23
Organisation and Administration ... ..		23
Physical Condition of School Children—		
Nurses' Inspections ... ..		24
Routine and Systematic Examinations ... ..		24
Tables I., II., III., and IV. ... ..		25-29
Medical Treatment ... ..		30
Minor Ailments ... ..		31-33
Minor Accidents in Schools ... ..		34
Major Accidents in Schools ... ..		34
County Dental Scheme ... ..		34
Eye Clinics—County and Large Burghs ... ..		40
Orthoptic Scheme for Squinters ... ..		42
Report by Dr Leeds on Strabismus Operations ... ..		43
Ear, Nose, and Throat Scheme ... ..		44
Orthopaedic Scheme ... ..		47
Speech Therapy ... ..		50
Mentally and Physically Defective Children ... ..		51
(a) Special Schools and Classes ... ..		51
(b) Institution Cases ... ..		51
Physical Education and Personal Hygiene of Children ... ..		51
Mothercraft Classes ... ..		52
Infectious Diseases in Schools ... ..		54
Treatment of School Children in Dunfermline ... ..		55

	Page
<b>5. Infectious and Other Diseases—</b>	
Incidence ... ..	6
Diphtheria Immunisation ... ..	6
Whooping Cough Immunisation ... ..	6
Notification of Infectious Disease Table ... ..	6
Tuberculosis—Notifications ... ..	6
Deaths ... ..	7
Cases on the Tuberculosis Notification Register ... ..	7
Cases Examined ... ..	7
Admissions to Sanatorium ... ..	7
X-Ray Examinations ... ..	7
Sputum Examinations ... ..	7
Treatment Allowances ... ..	7
Supply of Drugs and Dressings ... ..	7
Supply of Extra Nourishment ... ..	7
Lupus Treatment ... ..	7
General Comments... ..	7
Venereal Diseases ... ..	7
Diabetes (Supply of Food and Insulin) ... ..	8
Pathological Specimens ... ..	8
<b>6. Hospital Services—</b>	
Cameron Hospital ... ..	8
Thornton Infectious Diseases Hospital ... ..	8
West Fife Infectious Diseases Hospital ... ..	8
East Fife Infectious Diseases Hospital ... ..	8
Registration of Nursing Homes ... ..	8
<b>7. Nutrition</b> ... ..	9
<b>8. Food Infections</b> ... ..	9
<b>9. Mental Health Service</b> ... ..	9
<b>10. Milk Supply</b> ... ..	10
<b>11. Meat Inspection</b> ... ..	10
<b>12. Sale of Food and Drugs Acts</b> ... ..	11
<b>13. Housing—General Survey</b> ... ..	11
Temporary Houses ... ..	11
Permanent Houses ... ..	11
Private Enterprise ... ..	11
Three-roomed Houses ... ..	11
Building Byelaws ... ..	11
Housing (Rural Workers) Act, 1926-38 ... ..	11
Housing (Agricultural Population) (Scotland) Act, 1938 ... ..	11
<b>14. Water Supplies</b> ... ..	11



	Page
Drainage ... ..	118
Refuse Disposal ... ..	119
Factories Act, 1937 ... ..	121
Excerpts from Sanitary Inspectors' Reports ... ..	122
Public Health Services in Burghs—	
Leslie ... ..	128
Kinghorn ... ..	135
Inverkeithing ... ..	132
Markinch ... ..	130
Cowdenbeath ... ..	133
Buckhaven ... ..	135
Culross ... ..	136
Leven ... ..	131
Burntisland ... ..	137
Lochgelly ... ..	129
Anstruther ... ..	137
Crail ... ..	139
Elie ... ..	140
Pittenweem ... ..	141
St Monance ... ..	142
St Andrews ... ..	143
Tayport ... ..	146
Newport ... ..	147
Auchtermuchty ... ..	149
Cupar ... ..	150
Falkland ... ..	151
Ladybank ... ..	151
Newburgh ... ..	152
Examination and Certification of Blind Persons ... ..	153

## STAFF.

---

### County Medical Officer of Health.

G. MATTHEW FYFE, M.B., Ch.B., D.P.H.

### Deputy County Medical Officers.

#### Health Services—

G. M. MacGILLIVRAY, M.C., M.B., Ch.B., D.P.H.

J. COMRIE, M.B., Ch.B., F.R.C.S.(Ed.), D.P.H.  
(Interim).

#### Welfare Service—

R. A. KRAUSE, M.D., D.Sc., D.P.H.

#### Tuberculosis Service—

B. W. ANDERSON, M.A., M.D., D.P.H. Tuberculosis  
Officer and Medical Superintendent, Glen-  
lomond Sanatorium.

I. S. McCORMICK, M.B., Ch.B. Asst. Tuberculosis  
Officer.

J. W. FRASER, M.B., Ch.B. Asst. Medical Officer  
Glenlomond Sanatorium.

### Area Medical Officers.

C. C. BARCLAY, M.B., Ch.B., D.P.H.

G. A. H. GUMLEY, M.B., Ch.B., D.P.H., M.R.C.P.E.

JANE W. MacDONALD, M.B., Ch.B., D.P.H.

A. SHEILA MacLEOD, M.B., Ch.B., D.P.H.

ELSIE J. D. SCOTT, L.R.C.P., L.R.C.S.(Ed.), L.R.F.P.S.  
D.P.H.

HUGH SOMERVILLE, M.B., Ch.B., D.P.H.

JANET WILSON, M.B., Ch.B.

### Area Dentists.

MR A. BLACK, L.D.S.

MISS E. CLARK, L.D.S.

MISS A. DOUGARY, L.D.S.

MR WIGHT, L.D.S.

MR T. McLEOD, L.D.S.

MRS McQUITTY, L.D.S.

### Health Visitors.

MISS BEDDIE.

MISS BERRY.

MISS BISSET.

MRS BLACK.

MISS CONWAY.

MISS DEACON.

MISS CRICHTON.

MISS DEMPSTER.

MRS DOUGALL.

## **Health Visitors—Continued.**

MISS EDNIE.  
MISS GEMMELL.  
MISS HAWICK.  
MISS KENNEDY.  
MISS KINNEAR.  
MISS MELDRUM.  
MISS MacLEAN.  
MISS McPHERSON.  
MISS PATERSON.  
MISS SIME.  
MISS SIMPSON.  
MISS SLATER.  
MISS STUART.  
MISS TAYLOR.  
MISS WHITELAW.  
MISS WILSON.

## **Orthopaedic Staff.**

MISS BOOTH, Orthopaedic Nurse-in-Charge.  
MR A. MOIG, Physiotherapist.  
MISS M. DOW, Physiotherapist.  
MRS KYDD, Physiotherapist (part-time).

## **Orthoptist.**

MISS HALLIDAY.

## **Mental Health Service.**

### **County Psychiatrist—**

W. BOYD, M.B., Ch.B., D.P.H., D.P.M., Medical  
Superintendent, Fife District Asylum.

### **Psychologist—**

MISS I. C. McLEAN, M.A., B.Ed.

### **Psychiatric Social Worker—**

MISS L. PRATT YULE, M.A.

## **County Sanitary Inspectors.**

WILLIAM FALCONER.  
IAN L. GOODFELLOW.  
ALEX. M. GOUGH.  
ROBERT JUST.  
GEORGE MARK.  
JOHN S. E. RIDDLE.  
A. M. THOMSON.

## **Milk Officers.**

MRS COBB.  
MISS A. HENDERSON.

**Specialists (Part-time).**

**Ear, Nose and Throat—**

I. FARQUHARSON, M.B., Ch.B., F.R.C.S.(Ed.)  
Edinburgh.

**Eye—**

**East Fife—**A. M. MacGILLIVRAY, M.B., Ch.B., M.D.  
D.O.M.S., F.R.S.(Ed.), Dundee.

**West Fife—**D. C. LEEDS, M.D., Ch.B., F.R.C.S.(Ed.)  
D.O.M.S.

**Orthopaedic—**

R. STIRLING, M.B., Ch.B., F.R.C.S.(Ed.).

**Tuberculosis—**

**Glenlomond Sanatorium—**

BRUCE DICK, M.B., Ch.B., F.R.C.S.(Ed.)  
East Kilbride—Thoracic Surgeon.

R. STIRLING, M.B., Ch.B., F.R.C.S.(Ed.),  
Edinburgh—Orthopaedic Surgeon.

**Radiologist—**

A. CAMPBELL, M.B., Ch.B., D.R., Edinburgh

## FOREWORD.

There was a time not so long ago when the preparation of the Annual Report was an interesting diversion to be enjoyed at leisure. It afforded means for reviewing in deliberate retrospect the scope of the year's work, resulting sometimes in a modest glow of satisfaction at tasks well accomplished and sometimes in a chastening acknowledgment of error but always prompting, through mature reflection, an urge to build upon what had proved to be sound and to discard that which had not passed the test of practical experience.

Now-a-days, the Annual Report has become a thing of ragged and tattered thoughts inscribed at intervals as limited time and restricted opportunity affords—an uninspiring patchwork of words and figures with little constructional merit and no saleable value. The Annual Report, properly designed, illustrated and written, should be a major weapon in public health propaganda, something to be read for its own sake: not a stuttering sequence of disjointed paragraphs rendered even more incoherent by intervening quasi-statistical tables. Little wonder the document is perused only by the few.

The never-ending barrage of statutes, orders, regulations, and official circulars which falls on the desk of a medical officer of health of a large progressive area, and the unremitting frequency with which he has daily to apply his mind to one different subject after another, gives him neither time nor opportunity for calm reflection. In this he is not alone. The bulk of the population is affected with feverish, mental activity, which is consuming energy, destroying rest and undermining efficiency. Relaxation cannot come too soon.

This foreward will serve as an explanation and apology for the inadequacies of the Annual Report for 1946 and for the delay which has occurred in its presentation. The year has been one of activity in many directions. Demobilisation served to bring the appalling housing shortage into more prominent relief, and shortage of labour and material seriously handicapped the County Council's building programme. A slight rise took place in the infant and maternal mortality rates and health visitors have directed attention to a decline in breast-feeding among harrassed mothers living in overcrowded conditions which lack privacy and among other mothers, better housed, but wedded to the pursuit of pleasure. The death rate from tuberculosis remained high and evidence accumulated of a growing rate of infection of the population as a result of bad housing conditions and lack of isolation of open cases.

The most striking item on the other side of the balance sheet was the excellent state of health of the children, who showed unmistakable signs of having benefited by the measures now-a-days being taken to safeguard their well-being. It is indeed heartening to know that, while present circumstances may be weighing some-

what heavily on many of those on whom the brunt of the war for the generation which is rising to take their place is being physically and mentally better equipped to fight life's battles and to serve the nation.

In submitting this report, I take the opportunity of expressing gratitude to the County Public Health Committee, the other Committees, both Town and County, which I serve and to all my colleagues in the Public Health and other Departments for their unfailing help, support and encouragement.

G. MATTHEW FYFE,  
*Medical Officer of Health*





## The Health of the County of Fife, 1946.

### VITAL STATISTICS.

#### Population.

In 1946, the estimated population of Fife, excluding the Burghs Dunfermline and Kirkcaldy, was 197,583. As compared with the estimate for 1945, the Registrar General had allowed an increase of 7,987. Well-founded evidence points to a rapid and prolonged development of the Fife coalfields and to a considerable influx of population. Since it takes about five years for a new colliery to reach production and since, according to modern conceptions, means for employment must be found for those not directly engaged in the mining industry, it is not to be expected that the increase will be immediately dramatic. It will be measured in hundreds rather than thousands, gradually mounting as the years pass. It is nevertheless of importance that in inter-censal periods, the population be estimated as accurately as possible. If the estimate is too low, rates of births, deaths and marriages, &c., are erroneously increased: if it is too high, rates are artificially enhanced. The organisation of a Statistical Department in Fife is long overdue. In its absence, the County Council has to depend on the Registrar General for what statistical data he can provide from limited sources. A great deal of useful information regarding distribution of the population, relationship of employment to disease, incidence of incapacitating sickness and other matters which have a valuable influence on the formation of policy would become available.

No recent information is available regarding the density of population in Fife. In view of the industrial developments which are about to take place and of the extensive housing programme which the County Council have before them, it is well to recall the facts which the census of 1931 brought to light. The following table shows the number of persons per 100 acres in some parts of the County at that time.

## DENSITY OF POPULATION PER 100 ACRES IN CERTAIN PARTS OF FIFE.

FIFE COUNTY (excluding Large Burghs) ... ..					
BURGHs—					
Buckhaven	...	...	2698	Lochgelly	...
Cowdenbeath	...	...	2222	Markinch	...
Inverkeithing	...	...	1650	St Andrews	...
Leslie	...	...	1674	Tayport	...
Leven	...	...	2765		
DISTRICTS OF COUNTY—					
Cupar	...	...	16	Kirkcaldy	...
Dunfermline	...	...	52	St Andrews	...
CIVIL PARISHES (Burghs included)—					
Auchterderran	...	...	212	Leslie	...
Ballingry	...	...	265	Markinch	...
Beath	...	...	340	St Andrews	...
Carnock	...	...	41	Saline	...
Cupar	...	...	124	Scoonie	...
Dunfermline	...	...	182	Torryburn	...
Kennoway	...	...	43	Tulliallan	...
Kettle	...	...	20	Wemyss	...
Kinglassie	...	...	29		

### Births.

The increase in the number of births which characterised the war years was more than sustained in 1946 when, corrected for transfers, the number of births was 4,465—2,304 males and 2,161 females. The rate per 1,000 of population was 21·8.

The County Birth-rate, however, continued its downward trend. It is twenty years since the rate was as high as it was in 1946 when the cessation of hostilities had an influence which was to be expected. Since 1900, the rate has fallen as the population has increased.

			Population (excluding Large Burghs).	Birth-rate
1901-10	...	...	159,511	31·5
1911-20	...	...	200,035	24·6
1921-30	...	...	213,435	21·4
1931-40	...	...	197,436	17·2
1941-46	...	...	197,583 (estimated)	19·1

Since 1939, there has been a steady fall in the number of births, which was 134 in 1946. The corresponding rate was 20·7 per 1,000 births.

The *illegitimate birth-rate* showed a fall from 7·7 per 100 live births in 1945 to 6·2 in 1946.

### Marriage.

The return of men and women from war service did not result in a marked increase in the number of marriages which fell from 1,845 in 1945 to 1,632 in 1946. The rate—8·0 per thousand of population was, however, higher than the average peace-time level which, for the decade 1930-39, was 5·5 per 1,000.



### Deaths.

With the increase of population, the number of deaths increased from 2,341 in 1945 to 2,528 in 1946 (1,287 males and 1,241 females). The corresponding rates per thousand of population—12·2 and 12·8—showed that the comparative increase was slight.

For many years, the death rate has been comparatively low. The satisfaction which the fact engenders should, however, be tempered with the thought that biologically a lowered death rate tends to check the process of evolution and tends, if it sinks low enough, to a process of retrogression and degeneration. That many more people are now living to a ripe old age is a worth-while achievement so far as each individual is concerned but when postponement of the age at death is accompanied by decline in the number of births, there comes a time when nationally a preponderating increasing number of old people have to depend upon a proportionately decreasing number of young people. The current problem of the aged is a pointer in that direction. The modern growth in arrangements for the treatment and prevention of mental illness is perhaps another manifestation of a national degenerative change. In short, there are grounds for suggesting that the promotion of a low death rate procured by saving and prolonging sub-normal lives may lead to disaster unless steps are taken to enforce an application of eugenic methods. In every living species, except in general the population of Western Europe, the number of individuals born is much in excess of those necessary to maintain a stationary population. Mortality is immense but the process of elimination results in the survival of fit subjects and in the prevention of degeneration. Who are we to defy natural laws? Such a thought is perhaps alien to the principles governing the work of a public health department but it is well for us sometimes to pause and take our bearings.

The table on page 4 shows the causes of deaths classified according to age groups. The principal causes of death in order of frequency were diseases of the heart and arteries, cancer and diseases of the respiratory system. Deaths from these causes accounted for 62 per cent. of the total number of deaths.

### Cancer.

Mortality from *cancer* continued to rise. During the year, there were 346 deaths representing a rate of 1·75 per thousand of population—males ·88 and females ·85. This rate was higher than the average rate for the previous five years which was 1·69. This increase was described in the Report for the War Years. It has been greater among males than among females. It has not been possible to examine the rates of mortality in relation to environment but recent work by P. Stocks (Regional and Local Differences

# Causes of Death. Landward Area and Small Burghs, 1946.

Cause of Death.	All Ages.													
	Both Sexes	Males	Females	-1	1-5-	10-	15-	25-	35-	45-	55-	65-	75-	85-
Infectious and Parasitic Diseases ...	170	90	80	12	12	7	22	28	15	24	23	11	9	7
Cancer and Malignant Tumours ...	346	174	172	—	—	1	—	4	18	47	73	112	77	14
Tumours, Non-malignant or not defined ...	4	1	3	—	—	—	—	—	—	1	1	2	—	—
Acute Rheumatism ...	2	—	2	—	1	—	1	—	—	—	—	—	—	—
Diabetes Mellitis ...	31	9	22	—	—	—	1	—	—	6	2	14	8	—
Other General Diseases ...	34	20	14	—	1	—	3	1	1	2	5	13	8	—
Cerebral Haemorrhage : Diseases of Spinal Cord and other Diseases of Nervous System ...	326	141	185	4	3	2	2	8	4	11	52	121	95	22
Diseases of Circulatory System ...	802	401	401	—	—	—	5	7	19	48	106	276	246	95
Diseases of Respiratory System ...	234	135	99	50	6	2	5	6	11	28	35	35	40	16
Diseases of Digestive System ...	102	48	54	29	4	1	1	2	6	8	17	20	13	1
Diseases of Genito-Urinary System ...	100	67	33	1	1	—	5	2	3	11	15	36	24	2
Diseases of Pregnancy and Childbirth ...	14	—	14	—	—	—	3	8	3	—	—	—	—	—
Diseases of Skin and Organs of Movement ...	7	2	5	—	—	—	—	—	1	1	1	2	2	—
Congenital Debility, Premature Birth, Malformations, &c. ...	147	74	73	141	4	—	1	—	1	—	—	—	—	—
Old Age ...	84	32	52	—	—	—	—	—	—	—	—	13	48	23
Suicide ...	7	6	1	—	—	—	1	1	—	3	1	1	—	—
Road Transport Accidents ...	20	14	6	—	—	3	1	4	1	4	5	2	—	—
Other Violence ...	77	55	22	6	4	2	3	5	6	9	13	11	9	7
Causes ill-defined or unknown ...	21	18	3	1	—	—	—	—	1	3	4	3	8	1
Total ...	2528	1287	1241	244	35	19	5	53	76	90	206	353	672	188

n Cancer Death Rate. H. M. S. O.) encourages research. He has found that deaths from cancer of the stomach is highest in urban areas and lowest in rural areas. Cancer of the stomach appears to be closely correlated with social indices, ranging from 55 for social class 1 to 122 for social class 5. Cancer of the lungs showed no such correlation. Among females in urban areas, the worse the social conditions, the higher were the death rates for cancer of the stomach and womb and the lower the rates for cancer of the breast and ovary. The best social conditions were associated with a low mortality from cancer of the stomach but with a high death rate from cancer of the ovary. There was some correspondence between sources of water supply and cancer death rates but no evidence of a causative relationship between the two. Cancer of the stomach does not seem to be connected with economic or housing conditions *per se* but may be related to differences in the dietary or cooking habits of the population in different parts of the country. Insufficient data is available, however, to enable conclusions to be drawn. Cancer of the lungs appears to be associated with atmospheric conditions. If time and opportunity afforded, it would be interesting to study the distribution of cancer in Fife where there is a rising cancer death-rate and a wide variety of environmental factors. So relatively little is known about the causation of cancer that any methods of approach to the problem, no matter how unlikely, is worth investigation.

### Epidemic Diseases.

For the past ten years, the number of deaths from the *principal epidemic diseases* (typhoid fever, para-typhoid fevers, cerebro-spinal fever, whooping cough, diphtheria, influenza and measles) has progressively decreased :—

Year.	Rate per thousand of Population.				
1936	...	...	...	...	0.46
1937	...	...	...	...	0.86
1938	...	...	...	...	0.35
1939	...	...	...	...	0.25
1940	...	...	...	...	0.63
1941	...	...	...	...	0.44
1942	...	...	...	...	0.16
1943	...	...	...	...	0.42
1944	...	...	...	...	0.17
1945	...	...	...	...	0.11
1946	...	...	...	...	0.24

In 1946, the number of deaths was 48 and, of these, 39 were due to influenza. Two children who had not been inoculated died from diphtheria.

### Tuberculosis.

Deaths from tuberculosis showed no increase in numbers and remained below the figures for 1942 when war-time conditions had their greatest impact on mortality. Seventy-seven persons died from pulmonary tuberculosis and 28 from non-pulmonary, the respective rates being 0·39 and 0·14 per 1,000 of population. The rate for all forms was 0·53, the corresponding rate for 1945 being 0·55. Deaths and rates of mortality from tuberculosis are discussed in detail in the section of the Report dealing with tuberculosis.

### Accidents.

Accidents continue to take their toll on young life. Three children under fifteen years of age were killed through road transport accidents and 14 by other forms of violence. Of the 17 children who were thus deprived of life, 10 or 59 per cent. were under five years of age but none of them were killed on the roads. The Fife Regional Accident Prevention Council rightly pay much attention to the problem of reducing deaths among children from motor accidents and are considering the appointment of a Road Safety Organiser. It is perhaps not sufficiently realised, however, that other types of accidental deaths—burning, scalding, drowning and suffocation—are considerably more prevalent.

### Infant Mortality.

While the *infant mortality rate* for Scotland reached a record low level of 54 per 1,000 live births, the rate in Fife rose from 48 in 1945 to 54·6 in 1946. The increase was disappointing in view of the steady decline which has taken place since 1931. More than half of the deaths occurred within the first four weeks of life, indicating a continued prevalence of prematurity, difficulties of labour and maternal unfitness. Deaths in later months were due principally to whooping cough, bronchitis, pneumonia, influenza and infections of the bowels. This group was related principally to the section of the community which is subject to poverty (notably malnutrition) and to insanitary housing conditions. The relatively high infant mortality rate which prevails in the County, therefore, affords ample justification for improvement in the economic and housing conditions of the people. It calls, furthermore, for intensification in education in mothercraft.

The following Table gives the infant mortality rates for the landward part of the County and for the Small Burghs :—

### Infant Mortality Rates—Landward and Small Burghs, 1946.

				1946.	Average 1931-45.
Landward Area	...	...	...	57.8	68.6
Auchtermuchty Burgh	...	...	...	37.0	61.1
Buckhaven Burgh	...	...	...	52.5	74.9
Burntisland Burgh	...	...	...	21.5	47.4
Cowdenbeath Burgh	...	...	...	37.6	72.2
Craik Burgh	...	...	...	—	33.5
Culross Burgh	...	...	...	58.8	58.3
Cupar Burgh	...	...	...	91.7	41.4
Elie Burgh	...	...	...	—	28.1
Falkland Burgh	...	...	...	133.3	75.1
Inverkeithing Burgh	...	...	...	80.8	75.1
Kilrenny and Anstruther Burgh	...	...	...	14.7	43.5
Kinghorn Burgh	...	...	...	86.9	66.4
Ladybank Burgh	...	...	...	35.7	23.1
Leslie Burgh	...	...	...	—	54.5
Leven Burgh	...	...	...	44.9	59.2
Lochgelly Burgh	...	...	...	55.3	60.0
Markinch Burgh	...	...	...	60.0	54.1
Newburgh Burgh	...	...	...	75.0	39.5
Newport Burgh	...	...	...	35.7	39.2
Pittenweem Burgh	...	...	...	25.6	45
St Andrews Burgh	...	...	...	64.3	46.1
Tayport Burgh	...	...	...	105.2	55.2
St Monance Burgh (from 1933)	...	...	...	28.5	40.6

In view of the relatively small size of their populations, the rates for most of the Burghs must be accepted with reservations. Nevertheless, indications are that, while in the landward area deaths are steadily continuing to decline, rates in several Burghs are increasing to a disproportionate degree. In simple words, it is safer for a baby to be born and to live in 1946 in the landward part of the County than in the Burghs. Since there is little difference between landward and burghal economic conditions taken as a whole, it is possible that housing conditions, particularly overcrowding, and greater difficulties in obtaining balanced nutritious food may account for the less satisfactory state of affairs in Burghs. On the other hand, a notable decline took place in the rates for the Burghs of Buckhaven and Cowdenbeath which, in former years, showed the highest rates in the County. In the absence of an adequate explanation of this welcome improvement, therefore, no absolute conclusions can be reached concerning this problem of contrasts.

### Maternal Mortality.

The number of deaths in child birth was slightly increased but the downward trend in rate continued. The rate was 3.1 per 1,000 live births as compared with an average rate of 4.1 for the previous five years. Four deaths occurred in the Burghs—Buckhaven 1 and St Andrews 3. Ten deaths occurred in the landward County, the majority in the central industrial area. The burghal rate was



1·9 and the landward 4·3. The rate for the burghs would have been lower but for the relatively high incidence of maternal death in St Andrews. It is evident that there is room for a greater degree of ante-natal supervision in populous parts of the County. There have been fewer maternal deaths in localities where there is conveniently situated ante-natal clinic with specialist advice available.

## MATERNITY AND CHILD WELFARE SERVICE.

### Maternity Services Scheme.

More than half the births in the County took place under the County Council's arrangements for domiciliary midwifery. A doctor and a midwife of their own choice were provided for 2,458 women. The following statement shows the extent to which the services were utilised :—

Year	Number of Live Births in County	Number under the Scheme	Per cent-age	Confined by Doctor	Per cent-age	Confined by Midwife	Per cent-age	Removed to Hospital
1939	3297	211	6'4	100	48'8	105	51'2	6
1940	3351	1562	46'6	924	61'8	572	38'2	66
1941	3567	2000	56'1	932	48'8	976	51'2	92
1942	3720	2139	57'2	960	47'4	1067	52'6	112
1943	3846	2233	58'1	1015	47'6	1119	53'4	99
1944	4092	2363	57'7	1021	46'1	1194	53'9	148
1945	3737	2017	53'9	890	47'2	997	52'8	130
1946	4465	2458	55'1	1068	46'7	1218	53'3	172

It will be noticed that each year since 1941 more women have been confined by midwives than by doctors, and that there has been an increasing tendency for patients to be referred to hospital for confinement, a fact which reflects a greater degree of obstetrical care. Hospital treatment is not afforded under the Scheme but, though full details are provided under the section of this report dealing with Maternity Hospitals, it is here worthy of note that 135 women were confined in hospital during the year under County Council arrangements, and that the Local Authority assumed responsibility for attendance during pregnancy either at home or in hospital on 80·4 per cent. of all maternity cases.

The cost of the services provided under the Scheme for domiciliary midwifery in 1946 amounted to £10,772 7s.

### Midwives (Scotland) Acts.

There were 101 midwives registered on the County Midwives Roll as practising in the various districts of Fife during 1946 (Dunfermline, 17; Cowdenbeath and Lochgelly, 21; Kirkcaldy, 15; Arbroath, 15; Cupar, 17; St Andrews, 11; and Anstruther, 5). In 1945, the number was 84.

The number of births uncorrected was 4,374 (4,044 in 1944 and 3,670 in 1945). Of these, 2,221 were domiciliary cases, attended by midwives under the Maternity Services Scheme. There were also 99 domiciliary cases who were attended by midwives under private arrangement. The number of cases attended by midwives in institutions was 794 (a further 750 institution births were attended by doctors—333 in County, and 417 outwith the County). The following number of births were not attended by a midwife or a doctor—(a) under the Maternity Services Scheme, 51, and (b) by private arrangement, 13. A further 5 cases had not booked a midwife.

Of the uncorrected births (4,374) there were 132 deaths of newborn infants within 14 days of their birth. Sixty-nine of the occurred in the practice of midwives (44 under the Maternal Services Scheme and 25 private cases). The number of such deaths occurring in institutions was 60.

	Total No. of Cases.	No. in Practice M. S. S.	of Midwives. Private.	In Institution.	Others in Institution.
Ophthalmia Neonatorum ... ..	76	62	4	5	4
Puerperal Sepsis ... ..	5	3	1	—	—
Puerperal Pyrexia... ..	5	9	6	—	—
Still-births ... ..	118	44	15	29	28

There were no deaths among the puerperal sepsis and pyrexia cases.

The number of forms received from midwives by the Public Health Department were (a) Medical assistance, 184; (b) Dead before doctor's arrival, 1; (c) Still-birth, 17; (d) Laying out dead body, 5; (e) Liability to be a source of infection, 14; (f) Artificial feeding, 51.

The conditions for which medical assistance was sought was as follows :—

							1946	1947
Delayed labour ...	...	...	...	...	...	...	52	43
Abnormal labour ...	...	...	...	...	...	...	9	7
Torn Perineum ...	...	...	...	...	...	...	31	41
Maternal haemorrhage—								
Ante partum ...	...	...	...	...	...	...	5	6
Post partum ...	...	...	...	...	...	...	5	8
Weakness								
Mother ...	...	...	...	...	...	...	—	—
Baby ...	...	...	...	...	...	...	3	—
Premature births ...	...	...	...	...	...	...	4	—
Still-births ...	...	...	...	...	...	...	14	1
Inflamed and discharging eyes	...	...	...	...	...	...	39	2
Raised temperature ...	...	...	...	...	...	...	5	—
Adherent or retained placenta	...	...	...	...	...	...	8	1
Albuminuria ...	...	...	...	...	...	...	3	—
Miscellaneous (baby—rectal and oral haemorrhage; hydroamnios; foetal distress; death of infant; prolapsed cord) ...	...	...	...	...	...	...	6	1
							<u>184</u>	<u>19</u>

It was ascertained that 8 of these conditions were complications of pregnancy; 109 complications of labour; 5 complications of "lying-in"; and 62 complications relating to the infant.

An unusual case was reported among infant deaths soon after birth. This was a case where the cause of death was given as prematurity. According to calculations made by the family doctor this infant could not have had more than 22 weeks gestation, probably less than that. The question arose as to whether the



as a case for registration and the matter was referred to the Registrar-General. In his reply he indicated that while the statute which governs the registration of births in Scotland does not contain a definition of "birth" or "live-birth," the principle which has always been followed is that if a child is completely born and has breathed or given other signs of life after birth—although it died immediately thereafter—both its birth and its death ought to be registered. Reference is also made to the definition of the term "still-birth" in the Registration of Still-births (Scotland) Act, 1938. The inference to be drawn from the definition seems to be that a child which has breathed or shown other signs of life after complete expulsion was live-born, and that its birth should be registered.

### Supervision of Midwives.

Dr Wilson (Lochgelly-GlenCraig) reports that on the whole conscientious work is done but more stress could be laid on ante-natal care. She also indicates that increased remuneration for services has enhanced the value of the midwives' profession, and should attract more nurses to the work.

Dr Gumley (Cowdenbeath and West Fife) states that so far as he could gauge it, the work of the midwives in his area appears to be satisfactorily carried out.

Dr Somerville (Auchterderran, Burntisland, and Markinch) reports that in the case of two of the midwives, midwifery bags were not satisfactory, the difficulty being a matter of supply. Another difficulty was insufficiency of uniforms, particularly of overalls. The midwives affected were advised to apply to the Joint Organising Secretary of the Incorporated Midwives' Institute, London for supplementary coupons for uniforms. It was also suggested that they should raise the question of obtaining priority certificates for midwifery bags. Regarding the work of the midwives in this area the supervising Medical Officer stated that generally there was some slackness in the recording of the ante-natal findings. Even where the midwife is acting as a maternity nurse and the practitioner does the ante-natal examination, these should be noted in the appropriate place on the report form.

Dr Scott (Buckhaven-Wemyss-Leven) writes that she found the midwives working quite satisfactorily but that there is still a problem of breast-feeding versus bottle-feeding. Many mothers do not desire to breast feed their infants. According to one of the midwives the main reason for this is that it curtails their pleasure in the evenings. Some of the young women recently have explained that they do not wish to lose their figures. Against this, however, is the fact that Forth Park Maternity Hospital cases attending the local ante-natal clinics who have been wearing breast shields are now feeding their infants most satisfactorily.

### Midwives Acts (Claims).

In terms of the Midwives Acts, 1915 and 1927, the number claims received were 103 and the amount paid totalled £352 10. There were no refusals.

In the following table the number of claims received during the War years and the amounts paid are given :—

				Cases.	Refusals.	Amounts Paid
1939	...	...	...	137	—	£217 5
1940	...	...	...	60	1	105 8
1941	...	...	...	47	—	88 14
1942	...	...	...	49	—	108 10
1943	...	...	...	72	—	157 13
1944	...	...	...	72	—	164 1
1945	...	...	...	102	—	318 13

### Maternity Hospitals.

The total number of women and infants admitted to the various maternity hospitals was 1,176 (1,135 women and 41 infants). Of these, 1,125 paid the recognised fees, 15 were considered necessitous and 4 partly necessitous, and 32 were referred to the appropriate department for collection of outstanding fees. The number of cases admitted to maternity hospitals in 1944 and 1945 was 782 and 876. It will thus be seen that the number of women receiving hospital treatment is still increasing.

In the following table the number of cases admitted to the various maternity hospitals are detailed :—

	Total.	Women.	Infants.
Dunfermline Maternity Hospital ... ..	566	548	18
Forth Park Maternity Hospital, Kirkcaldy	446	424	22
Meikleour, Perthshire ... ..	143	142	1
Bridge of Allan ... ..	11	11	—
Dunfermline Home and Hospital ... ..	3	3	—
Edinburgh Royal Infirmary ... ..	7	7	—
	<hr/> 1176	<hr/> 1135	<hr/> 41

Of the 143 patients admitted to Meikleour House Hospital, 6 were removed to Perth Royal Infirmary.

In July, 1946, arrangements were made with the Fife Branch of the British Red Cross Society, whereby patients travelling to and from Meikleour Hospital could have the use of an ambulance garage at the premises of the Fifeshire Posting Company, Kirkcaldy, at a cost of 5s per single journey. This arrangement has been a definite boon to the mothers who have made use of it. For the enterprise and generosity the Red Cross deserve sincere thanks.

In January, 1946, the County Council purchased Mount Melville House, near St Andrews. This house is in progress of being converted into a maternity hospital, containing 38 beds, which will be known as "Craigtown."

Work at Netherlea Hospital, Newport, is still in progress. Difficulty in the supply of labour and material is holding up progress. When completed the hospital will contain 17 beds.

### Health Visitors—Home Visitations.

The Health Visitor when she receives notification of a birth ranges to visit the home of the infant as soon as possible after the fourteenth day. In special cases or circumstances she may enquire and report about the baby to the Area Medical Officer even before the fourteenth day.

On the "first visit" the Health Visitor pays special attention to the condition of the home. From the reports sent in by the nurses it appears that in 3,935 cases (or 91 per cent.) the homes were clean, while in 71 (or 1·6 per cent.) they were judged to be dirty. In the case of 308 homes the condition found was graded indifferent. When the reports for the various parts of Fife were compared it was noted that in Anstruther and Kirkcaldy areas, the percentage of homes graded as clean was above 95, as against 83 in the Dunfermline area.

Feeding of the baby is a matter of importance to the Health Visitor who ascertains the number of mothers who undertake breast feeding. While a large proportion of mothers still breast feed their babies there is an increasing number who change to bottle-feeding before the nurse's first visit. In these cases no special effort is being made to continue breast feeding. This applies particularly to cases where there has been difficulty with the breasts in previous confinements. Some of these mothers, on the instructions of their medical advisers, take special tablets to disperse the breast milk. These mothers are of the type who do not usually attend ante-natal clinics, whereas mothers who attend at ante-natal clinics during the pre-confinement period accept the advice given them as to the care of their breasts, and remarkably few failures ensue. One of the Health Visitors states that mothers are worried by difficulty in obtaining help in their homes, lack of household linen, and by the strain of obtaining necessary foodstuffs. Worries such as these tend to stop breast-feeding. Since the cessation is the outcome of a mental attitude, its remedy calls for more applied psychological advice on the part of the medical and nursing staffs. Another nurse indicates that the discomforts of over-crowding cause people to have evenings out twice or thrice weekly. Even when they remain at home, however, there is often insufficient privacy for breast-feeding. Under circumstances such as these it is very difficult for the nurses to succeed in persuading mothers to maintain breast feeding.

Actual figures show that during 1946 at the first visit, 2,663 (or 63·7 per cent.) cases were breast fed, while 1,362 (or 32·6 per cent.) were "bottle-fed," and that in the case of 150 (or 3·5 per cent.) a mixed method of feeding was in use. Figures for different areas of the County are as follows:—

Anstruther, 146 (51 per cent.) ; St Andrews, 200 (56·3 per cent.) ; Bemyss, 502 (58·5 per cent.) ; Dunfermline, 378 (59·6 per cent.) ;

Cupar, 278 (63 per cent.) ; Cowdenbeath and Lochgelly, 816 (77 per cent.) ; and Kirkcaldy, 343 (77·9 per cent.).

It is of interest to compare these figures with those for 1945. In that year the percentage of mothers who were breast-feeding their babies was 82·5. Furthermore, the percentages for the various areas ranged from 78 (Anstruther) to 84 (Cowdenbeath and Lochgelly and Kirkcaldy). There were, therefore, less variations than were recorded in 1946.

In the reports on the condition of the infants there is general agreement among the health visitors that despite the rationing system there was no apparent evidence to indicate that the young infants were affected in their nutrition. Judged by their weight, the infants were, generally speaking, of good average. Only one nurse in the West of Fife states that in her area they were smaller but otherwise appeared active and healthy. There can be no doubt that the use made by mothers of supplementary foodstuffs (orange juice, cod liver oil, &c.) is a contributing factor towards the healthy appearance of the infants.

Of the supplementary foodstuffs, orange juice is naturally the most popular, and in some areas a high percentage of the mothers make good use of it. This applies especially to those attending the ante-natal clinics where every encouragement is given to take vitamin preparations. Lately, with increasing quantities of fresh fruits becoming available, mothers have shown a preference for them, and consequently when fresh fruit is available there is a drop in the consumption of bottled vitamins.

It is noted by some of the nurses that fewer babies now sleep beside their mothers and that quite a few are kept in their prams.

The Health Visitors also visit the homes for the supervision of the children aged one to five years—the “toddlers” and pre-school children. Most of them report that despite rationing there seemed to be no noticeable adverse effect on the nutrition of these children. This they ascribe to the extra milk which is available. Several of the nurses make reference to a definite improvement in the condition of the teeth of young children. Some, however, have noted that the older children showed an increased incidence of enlarged tonsils and adenoids, and one nurse states that “there seems to be an increase in allergic reactions—rashes and heat spots appear as a result of eating certain fruits.” A few nurses have noted an increase in orthopaedic conditions of the feet and think that this may be due in part to poor footwear. The difficulty of obtaining satisfactory boots and shoes is referred to by other nurses. While most mothers see that their young children partake of the milk allotted to them, there are some families who buy no milk and use the allowance meant for the “toddlers.”



In addition to lack of adequate footwear, mention is also made of lack of soap. This and reduced supplies of coal tend to increase uncleanness amongst young children. There is also difficulty in obtaining fireguards, and most of the nurses point to the dangers arising from the absence of adequate protection. Even in those homes where there are fireguards it is found that they are often too small for the purpose of preventing young children from getting near the hot metal parts of the fire. Some nurses state that there is no definite need for this form of protection as most parents watch their children sufficiently to prevent them being burned but a mother cannot always be on the watch. There is every evidence that over-crowding is adding to the number of burns by scalding.

In the performance of their duties the Health Visitors made 7,854 visits to the homes of mothers and infants. In these visits they saw 4,195 mothers, 28,653 infants and nursing mothers as well as 27,901 children under 1-5 years—these were all new and old cases.

The nurses also act as visitors under the Tuberculosis Scheme, and the number of visits made were 2,583 (pulmonary cases) and 2,475 (non-pulmonary cases). The total number of visits made during the year was thus 52,916 as against 52,415 in 1945.

### Infant Protection.

The Health Visitors act as Infant Protection Visitors and in the course of this work they made 84 visits, seeing 88 children, concerning whom reports were sent to the Central Office.

The number of children on the register was 22, and to this were added 16 new cases—preliminary cases. At the first visits to the preliminary cases it was found that in 13 of the homes there was no fireguard. All the guardians are asked to sign the usual form indicating that they had been told of and understood their responsibility should any child be burned because of absence of fireguard.

Nine children were removed from the district and eleven returned to their relatives.

During the year eight children were legally adopted by their guardians.

### Maternity and Child Welfare Centres.

The Maternity and Child Welfare Centres in the more thickly populated parts of the County serve the purpose of giving mothers the opportunity of consulting the area medical officers regarding their infants and toddlers, and of having their infants regularly weighed. They are not substitutes for home visitations by the Health Visitors. The following are the clinics in the various areas:—

*West Fife (Dr J. Macdonald)*—Torryburn; Inverkeithing; Crossgates; Blairhall; Kincardine; Saline and High Valleyfield.

*Cowdenbeath (Dr Gumley)*—Burgh Clinic, Cowdenbeath ; Kelty  
*Lochgelly (Dr J. Wilson)*—Lochgelly Welfare Centre ; Crosshill  
 and Auchterderran.

*Markinch (Dr Somerville)*—Burntisland ; Kinghorn ; Markinch  
 Welfare ; Leslie ; Thornton ; Kinglassie and Coaltown  
 Balgonie.

*Buckhaven-Leven (Dr E. Scott)*—Barrie Street, Methil ; and  
 Leven Welfare.

*Cupar (Dr Lundie)*—Cupar ; Auchtermuchty ; Newburgh and  
 Ladybank.

*St Andrews-Anstruther (Dr S. MacLeod)*—St Andrews Welfare  
 Centre ; Anstruther and Tayport.

In addition to weighing of infants and consultations, mothers  
 had made available to them accessory food-stuffs at most of these  
 clinics.

The total number of infants and toddlers seen at these clinics  
 was 3,317 (2,975 in 1945), and these made 21,563 attendances  
 (21,660 in 1945). The figures for the individual clinics are in  
 the following table:—

#### Maternity and Child Welfare Clinics, 1946.

Clinic.	New Cases.					Attendances
Crossgates ... ..	...	...	...	...	104	1012
Torryburn ... ..	...	...	...	...	86	172
Blairhall ... ..	...	...	...	...	48	175
High Valleyfield ... ..	...	...	...	...	28	97
Steelend ... ..	...	...	...	...	21	204
Inverkeithing ... ..	...	...	...	...	20	53
Kincardine ... ..	...	...	...	...	26	43
Dunfermline Area ... ..					333	1756
Cowdenbeath ... ..					251	2480
Kelty ... ..					353	1424
Beath Area... ..					604	3904
Lochgelly ... ..					403	2775
Auchterderran ... ..					156	1262
Crosshill ... ..					124	969
Lochgelly Area ... ..					683	5006
Burntisland ... ..					116	635
Kinghorn ... ..					44	365
Thornton ... ..					117	589
Markinch ... ..					60	449
Leslie ... ..					74	446
Coaltown of Balgonie ... ..					59	275
Kinglassie (1 month only) ... ..					1	6
Kirkcaldy Area ... ..					471	2765

Clinic.					New Cases.	Attendances.
Methil	...	...	...	...	256	1883
Leven	...	...	...	...	179	1142
Methil Area	...	...	...	...	435	3025
Auchtermuchty	...	...	...	...	66	287
Castlehill	...	...	...	...	184	998
Ladybank	...	...	...	...	74	443
Newburgh	...	...	...	...	32	325
Cupar Area...	...	...	...	...	356	2053
St Andrews	...	...	...	...	143	1348
Tayport	...	...	...	...	162	743
Anstruther	...	...	...	...	130	963
North-East Fife	...	...	...	...	435	3054
TOTAL	...	...	...	...	3317	21563

### Ante-Natal Clinics.

The ante-natal clinics at Lochgelly, Auchterderran and Methil Welfare Centres were continued. In Lochgelly and Auchterderran, clinics were held twice monthly with an average attendance of over 2 at each clinic. The great majority attending were the younger mothers—65 per cent. being under 30 years of age and 35 per cent. over 30 years. Abnormal cases were referred to the visiting obstetrician from Forth Park Maternity Home, but emergencies which arose between clinics were referred directly to Kirkcaldy. Cases booked for Dunfermline Maternity Hospital did not attend either of these clinics, the ante-natal work all being done at the Hospital Clinic.

At Methil the ante-natal clinic was held weekly, and twice each month the services of the County obstetrician were available. Local doctors referred cases for consultation. It would be helpful if general practitioners wherever possible informed the clinic staff when they are going to send more than one or two patients. On one occasion about 12 special cases were sent by one of the local doctors and as a result the arrangements made for other cases were badly upset. At Methil special attention is given to breast feeding and the technique introduced by Dr Weller is applied.

The number of cases attending these clinics are detailed in the following table:—

Clinic.					New Cases.	Old Cases.	Attendances.
Auchterderran	...	...	...	...	70	406	476
Lochgelly—							
(a) Crosshill Cases	...	...	...	...	39	249	288
(b) Lochgelly and Lum-							
phinnans Cases	...	...	...	...	28	176	204
Methil	...	...	...	...	49	301	350
					186	1132	1318

The number of cases for 1945 was 186. They made 1,297 attendances.

The following notes are subscribed by Dr Frame Flint, Obstetrician, Forth Park Maternity Hospital, and by other medical officers concerning the County ante-natal and post-natal clinics other than at Dunfermline Maternity Hospital.

During the year patients continued to be admitted to Forth Park Maternity Hospital in two categories, booked and emergency, which together totalled 423 cases.

### I.—Booked Cases.

The ante-natal regulation of these cases was supervised by the obstetrician working from three County Clinics, Methil, Lochgelly, and Auchterderran, together with Kirkcaldy Burgh Clinic. On several occasions the obstetrician paid domiciliary visits to patients at the request of general practitioners in various areas of the County. Advice was given for the correct treatment of some cases who could remain in their own homes, and others were referred to hospital for further investigation or for special treatment.

Normal cases booked for hospital were 265.

In addition to these demands for the services of the obstetrician there were numerous telephone consultations with practitioners desiring advice as to the correct treatment of patients ante-natal and parturient, and puerperal.

There were several requests for the services of the obstetrician as a private specialist, which had to be given *ex gratia*.

### II.—Emergency Cases.

An analysis of the 158 obstetric emergencies admitted to Forth Park Maternity Hospital is attached :

(a) according to district ;

(b) according to the obstetric data.

This latter classification corresponds to that adopted in classifying the C. M. B. forms.

Analysis of Emergency Obstetric cases (158) referred to Maternity Hospital, Kirkcaldy—

#### (1) Distribution.

Windygates	...	...	2	Anstruther	...	...
Methilhill	...	...	3	St Andrews	...	...
Methil	...	...	15	Cupar	...	...
Buckhaven	...	...	15	Dairsie	...	...
Leven	...	...	11	Pitlessie	...	...
East Wemyss	...	...	5	Coaltown of Balgonie	...	...
Coaltown of Wemyss	...	...	1	Thornton	...	...
Upper Largo	...	...	1	Markinch	...	...
Colinsburgh	...	...	1	Leslie	...	...
Kilconquhar	...	...	1	Clunie	...	...
Elie	...	...	1	Cardenden	...	...
Earlsferry	...	...	1	Lochgelly	...	...
Arncroach	...	...	1	Glencraig	...	...
St Monance	...	...	2	Lochore	...	...
Kingsbarns	...	...	2	Kinglassie	...	...
Lundin Links	...	...	1	Crosshill	...	...
Burntisland	...	...	6	Lumphinnans	...	...
Kinghorn	...	...	3	Auchtertool	...	...

Total Emergencies, 158.



This analysis of obstetric emergencies does not include emergencies occurring in patients booked for the Maternity Hospital.

## (2) Obstetrical Analysis of County Emergencies.

### *Complications of Pregnancy—*

Toxaemia	...	...	32	A. P. Haemorrhage	...	17
Eclampsia	...	...	6	Epistaxis	...	1
Pyelitis	...	...	4	Versions	...	3
Jaundice	...	...	1	False Labour	...	2
Abortions	...	...	14	*Ectopic	...	1
Threatened	...	...	3			

(\*Full term).

### *Complications of Labour—*

Delayed Labours	...	—	Hydrocephalus	...	1
Forceps Deliveries	...	13	Brow	...	2
Craniotomy	...	4	Primature Breech	...	4
Decapitation	...	1	Multiple Breech	...	4
Caesarian Section	...	6	Transverse	...	1
Porro Section	...	1	Triplets	...	1
Obstetric Shock	...	2	Placenta praevia	...	3 C
Ruptures Uterus	...	2	Concealed accident	...	1

Blood transfusions, 7 patients.

(C—Central).

### *Complications of Lying-In—*

Retained Placenta	...	2	Post-partum Eclamp.	...	2
Post-partum Haemorrhage	...	2	Pyrexia and Fever	...	—
Gynaecological Repair	...	1			

### *Complications of Infant—*

Still Births	...	18	*Anencephalus	...	2
Prematurity & Debility	...	6	Jaundice	...	—
Twins	...	4	Ophthalmia	...	—
Neo Natal Deaths	...	6			

(\*B. coli septicaemia).

These figures are allocated according to the major condition obstetrically, and again do not include abnormalities and complications occurring in booked cases.

## General Remarks on the Obstetric Work.

Although many of the toxaemias are admitted to hospital opportunely there are still a number who enter too late to prevent the onset of eclampsia. It is to be hoped that closer co-operation with County practitioners will be achieved. This may result in a larger number of toxaemias and a smaller number of eclamptics being admitted.

The number of abortions and miscarriages (14) admitted does not give any indication of the true number of these patients regionally since the hospital only admits booked ante-natals.

One full term ectopic pregnancy was admitted—this is among the rarest obstetric calamities. Unfortunately the case was complicated by bowel obstruction which precipitated spurious labour and contributed to the fatal issue.

The proportion of craniotomies and decapitation to forceps deliveries was high. This is to some extent accounted for by

hydrocephalus, but on the whole is regrettable. Improved ante-natal work should reduce these destructive procedures to an unavoidable minimum.

Two patients were admitted with ruptured uterus—in one of them this catastrophe was complicated by partial inversion of the uterus. This complicated case proved fatal.

One case of central placenta praevia proved fatal. She had had outside interference before admission and did not respond to blood transfusion. One case of concealed accidental haemorrhage proved fatal. The haemorrhage was severe and some delay had occurred before hospitalisation.

The gynaecological repair admitted was a patient who had shown delayed healing with a previous tear, and a recurrence of this with her second confinement. The operation was a success.

*Blood Transfusion.*—The figure 7 does not give a true picture of the number of transfusions given. Several of these patients received more than one transfusion. Transfusions of plasma glucose-saline, &c., are not included, nor are transfusions given in domiciliary emergencies. In addition to AB grouping the hospital is now equipped with a rhesus anti-D screen for more accurate blood testing.

#### Analysis of Complications affecting the Infant.

Still-Births	...	...	32	Neonatal Deaths	19
*Dystocia	...	...	14	Prematurity & Debility	9*
V. D.	...	...	1	Congenital Abnormality	4*
Ante-part. Haemorrhage	...	...	5	Cerebral Haemorrhage	3
*Prematurity	...	...	2	Maternal Toxaemia	2
**Foetal Abnormality	...	...	8	Full Term Ectopic	1
Toxaemia	...	...	2		

Still-births could be classified as avoidable\*, unavoidable and desirable\*\* ; similarly neonatal deaths. Under the heading of avoidable there are 16 still-births and 3 neonatal deaths. It is to be hoped that a proportion of these will be reduced with better ante-natal supervision.

#### An Analysis of County Maternal Deaths in Forth Park Hospital.

*Obstetric shock, Nephritis and cardiac	...	...	1
*Concealed (combined) Accidental haemorrhage	...	...	1
*Full term ectopic preg. with live birth	...	...	1
Central placenta praevia ? transfusion	...	...	1
Ruptured uterus with partial inversion	...	...	1
Toxaemia and Cardiac	...	...	1
Toxaemia, contracted pelv. recent parturition	...	...	1

No ante-natal treatment is likely to prevent recurrence of these deaths marked \*.

Practitioners at present do not fully understand the implications of Rhesus incompatibilities nor the necessity for immediate transfusion of the infant. Erythroblastotic mothers similarly show disinterestedness and lack of co-operation, which only the practitioners can combat.

*Lochgelly and Auchterderran.*

These bi-monthly clinics are becoming better appreciated by the patients as shown by the increasing numbers.

The orthopaedic room at Lochgelly is satisfactory for ante-natal work, but the dental room at Auchterderran is makeshift, cramped and awkward. Co-operation with the local practitioners here is satisfactory.

*Methil.*

This clinic has been restored to bi-monthly frequency. There has been a very considerable increase in the number of cases attending. It would seem that another session each month will soon be indicated, unless the opening of the Leven ante-natal clinic relieves the pressure on Methil. Co-operation here with local practitioners could be improved, and might tend to reduce the number of emergencies occurring in this area.

*Kirkcaldy Burgh Clinic.*

The patients attending this clinic do so either by request of the obstetrician—to achieve close supervision—or by reason of having booked for confinement at the Kirkcaldy Maternity Hospital. X-ray investigation of ante-natal patients is performed at the Kirkcaldy General Hospital with the co-operation of the radiographer, Mr Boler. To existing facilities, pelvimetry and cephalometry, cystography and pyelography have been added with Mr Boler's help.

A considerable number of patients have been referred to the birth control clinic, and a few have been referred to the newly established sterility clinic.

The post-natal clinic continues to operate at Forth Park twice monthly and is well attended.

**Ultra-Violet Radiation.**

Ultra-violet radiation or artificial sunlight treatment was available for children and expectant or nursing mothers at 3 clinics—Cowdenbeath (Mercury vapour lamp), Lochgelly (Mercury vapour lamp), and Methil (Carbon arc lamps). Cases of debility, anaemia, rickets, &c., were the types chiefly treated. A total number of 409 cases received in all 7,564 treatments. A resume of the cases seen at these clinics is given in the following table:—

	LOCHGELLY.		COWDENBEATH.		METHIL.	
	Cases.	Attendances.	Cases.	Attendances.	Cases.	Attendances.
Infants ...	11	94	—	—	5	29
Pre-school Children ...	45	963	46	736	50	897
School Children	32	1297	134	1698	74	1464
Nursing Mothers	—	—	—	—	1	20
Other Cases ...	5	245	—	—	6	121
Totals ...	93	2599	180	2434	136	2531
Totals for 1945	119	2549	92	755	98	1757

### County Radiological Scheme.

In the County, orthopaedic cases can be radiographed when there is any doubt about or need to confirm diagnosis. The work is under the guidance and control of Dr Angus Campbell and his staff, and is done mainly at clinics (Canmore School Clinic, Dunfermline; Child Welfare Clinic, Lochgelly; and Welfare Clinic, Cowdenbeath) and at the Wemyss Memorial Hospital, Buckhaven and the Adamson Hospital at Cupar. Occasionally other clinics with electric power are used for the portable apparatus operated by Dr Campbell.

During the year 1946 the number of cases X-rayed under the Orthopaedic Scheme was 155 (87 in 1945).

Although a big proportion of the cases was from the orthopaedic department, an increasing number of cases undergoing dental treatment was dealt with. The number of such cases was 7 (7 in 1945).

In addition, the Ear, Nose and Throat Specialist referred cases more particularly those suspected to have "sinus" trouble. The number of cases so referred was 3.

The work under the scheme forms a very valuable adjunct to diagnostic equipment and an increasing use of radiological investigation is to be expected. The cost for these radiographs was £161 18s 1d.

Under the scheme, radiotherapy is applied in the treatment and cure of ringworm of the scalp. Fortunately, no case requiring radiotherapeutic treatment in 1946.

### Home Help Scheme.

In 1944, the Public Health Committee decided to inaugurate a Home Help Scheme. Difficulty was at first encountered with regard to obtaining suitable applicants, but there is now a list of 33 women who have indicated their willingness to act in the capacity of Home Help. The following are the areas in which Home Helps are available:—

Wemyss Area	...	...	...	...	...	14
Kirkcaldy Area	...	...	...	...	...	13
Lochgelly Area	...	...	...	...	...	1
Cowdenbeath Area	...	...	...	...	...	3
St Andrews Area	...	...	...	...	...	2

Home Helps are paid at the following rates, and reclaimed made from mothers according to their financial circumstances:—

For one complete week	...	...	£3	8	0
For less than one week	...	...	0	10	0 per day.
For 5 hours or less daily	...	...	0	1	9 per hour.

The following is a statement of the occasions on which the services of Home Helps were utilised:—

Year.	Cases.	Paid.	Necessitous.
1945	2	1	1
1946	10	9	1



## SCHOOL MEDICAL SERVICES.

### School Population—

Total Roll at September, 1945	...	...	...	42,337
Average Roll, 1945-46	...	...	...	42,484.6
Average attendance	...	...	...	36,801.76
Percentage attendance	...	...	...	86.62

### Number of Schools—

(a) Primary	...	...	...	...	133
(b) Secondary	...	...	...	...	22
(c) 1. Special Schools	...	...	...	...	1
2. Special Classes in ordinary schools	...	...	...	...	4
(d) 1. Nursery Schools	...	...	...	...	1
2. Nursery Classes attached to ordinary schools	...	...	...	...	5

### School Buildings.

The main work in connection with school buildings was the reinstatement of those that had been used in part as First Aid posts. Schools where such re-conversion was necessary were:—Buchterderran Junior Secondary, Torryburn Junior Secondary, the gymnasium for Buckhaven High, Sinclairtown and Abbotshall Infant Schools, as well as part of Dysart School. The reinstatement was completed at Abbotshall and Dysart Schools.

Work of re-converting King's Road and Park Road Schools in Rosyth was also begun, and as regards the latter, was completed with the exception of the dressing rooms and the sprays attached to the gymnasium. Work was also started at Pittencrieff School. At Leslie, the ground floor of the new school building, which was designed as a war-time nursery, was being converted for use as nursery and infant class rooms. The upper storey is still not available.

Central heating is being introduced into the Madras Infant School and into the classrooms for the Special Classes at Lochgelly S. School.

In addition to the foregoing and other minor repairs, arrangements are being made for the provision of dining room and the necessary wash-up facilities at all the schools in the County.

### Organisation and Administration.

There was no alteration in the organisation and administration of the School Medical Service. The County Deputy Medical Officer for Welfare, assisted by six area medical officers, was responsible for the work. In the two large burghs of Kirkcaldy and Dunfermline, school medical inspection and treatment was the responsibility of the medical staff of the Town Councils, which act as agents for the County Council.

In October, 1945, Dr Somerville returned from military service, and in view of the increasing amount of work the opportunity

was taken of increasing the number of area medical officers to seven. There were four changes in the dental staff. Misses M'Arthur, Lochhead, and King resigned and Misses Clark and Dougarty were appointed. In addition two dentists, Mrs Storey and Miss Muir were appointed in a temporary capacity.

The medical staff are assisted by twenty-two whole-time Welfare Nurses and twenty-nine District Nurses. Two of the latter are available for the work in the burghs of Burntisland and Newburgh while the remainder of the District Nurses help with the school work in the rural areas.

The Welfare Nurses (including the District Nurses) paid 2,666 visits to the schools in the County—Dunfermline area, 374; Cowdenbeath and Lochgelly area, 716; Cupar area, 417; Anstruther area, 215; St Andrews area, 212; Kirkcaldy area, 281; and Wemyss area, 397; Kirkcaldy Burgh Nurses made 440 school visits and Dunfermline Burgh, 97.

### Physical Condition of the School Children.

#### Nurses' Inspections.

County—No. of children inspected	...	...	...	20,866
No. of children re-inspected	...	...	...	46,900
Total	...	...	...	67,766

At the school visits (26,120) the number of children found with defects at the first-time inspection was 4,492. The defects were as follows:—head vermin, 1,897; body vermin, 8; ringworm (scalp), 4; scabies, 282; uncleanness or neglect, 162; impetigo contagiosa, 351; other skin conditions, 139; otorrhoea, 6; eye disease (external), 212; ear cases, 47; nose and throat cases, 205; other cases, 451; cuts and bruises, 324; septic conditions, 329; accidents, 17; out of these cases it was found necessary in 2,086 instances for the nurses to visit the homes to advise the mothers. The number of home visits was 2,386.

These 2,086 cases were chiefly distributed as follows:—head vermin, 1,018; body vermin, 7; ringworm, 4; scabies, 18; uncleanness or neglect, 121; impetigo contagiosa, 183; other skin conditions, 65; otorrhoea, 11; eye disease (external), 7; ear cases, 18; nose and throat cases, 43; cuts and bruises, 16; septic conditions, 58; accidents, 9; other cases, 191.

Number of children inspected at systematic examinations who were notified to their parents or guardians as requiring treatment (excluding uncleanness and dental caries):—

Entrants	...	...	...	...	...	898
Second age group	...	...	...	...	...	24
Third age group	...	...	...	...	...	422
Fourth age group	...	...	...	...	...	507
Secondary age group	...	...	...	...	...	7

---

1858

The number of children belonging to the routine age groups and examined were distributed as follows:—Kirkcaldy Burgh, 1,194; Dunfermline Burgh, 1,951; North East Fife, 1,635; Kirkcaldy and Wemyss Landward, 2,392; Cowdenbeath and Lochgelly District, 2,332; Dunfermline Landward, 556. Total, 10,060. The defects found among these children are summarised in the table of systematic examinations.

Table I.

Total number of children in the County and the two large Burghs examined :—

				Systematic Examinations.	Other Systematic Examinations.
a)					
Ordinary schools	{	Entrants ...	...	3854 (2605)	506 (506)
		Second age group ...	...	1882 (1241)	517 (517)
		Third age group ...	...	2603 (1457)	396 (396)
		Fourth age group ...	...	151 (37)	25 (25)
Secondary schools	}	Age group ...	...	68 (68)	58 (58)
Total ...				8558 (5408)	1502 (1502)
(b) Other Examinations—					
Special cases ...				3630 (3511)	
Re-inspections by Medical Officer ...				2140 (2030)	
Total ...				5770 (5541)	

Number of *individual* children inspected at systematic examinations who were notified to parents as requiring treatment (excluding uncleanliness and dental caries) :—

Entrants ...	...	...	...	898 (650)
Second age group ...	...	...	...	422 (250)
Third age group ...	...	...	...	507 (269)
Fourth age group ...	...	...	...	24 (9)
Secondary age group ...	...	...	...	7 (7)
Other systematic examinations	...	...	...	— —
Total ...	...	...	...	1858 (1185)

N.B.—County figures in brackets.

**Table II.**  
**SYSTEMATIC EXAMINATIONS.**

Return of number and percentage of individual children in each age group suffering from particular defects :—

Nature of Defect.	Entrants.		Second Age Group.		Third Age Group.		Fourth Age Group.		All Ages	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
<b>1. Clothing—</b>										
Unsatisfactory ...	10	10	21	10	15	20	—	1	46	4
<b>2. Footgear—</b>										
Unsatisfactory ...	13	8	22	7	21	8	—	—	56	2
<b>3. Uncleanliness—</b>										
(a) Head : Dirty, nits or vermin	18	104	12	65	14	169	—	4	44	34
(b) Body : Dirty or verminous...	14	14	21	22	29	55	—	1	64	9
<b>4. Skin—</b>										
(a) Head : Ring-worm ...	2	—	1	1	—	—	—	—	3	—
Impetigo ...	10	8	7	8	12	3	—	—	29	1
Other diseases ...	23	13	6	4	10	13	4	1	43	3
(b) Body : Ring-worm ...	2	2	—	—	1	—	—	—	3	—
Impetigo ...	7	5	—	5	3	2	—	—	10	1
Scabies ...	25	26	24	23	17	30	—	—	66	7
Other diseases ...	33	30	35	24	24	22	2	3	94	7
<b>5. Nutritional State—</b>										
Sl. defective ...	119	105	63	50	67	120	3	1	252	27
Bad ...	2	5	3	4	6	7	1	—	12	1
<b>6. Mouth and Teeth—</b>										
Unhealthy ...	185	171	209	181	164	183	15	6	573	59
<b>7. Naso pharynx—</b>										
(a) Nose :										
i. Obstruction requiring observation ...	75	67	31	24	22	11	—	1	128	10
ii. Requiring operation ...	88	64	32	29	10	16	—	—	130	10
iii. Other conditions ...	20	22	23	15	11	9	1	—	55	4
(b) Throat :										
i. Tonsil requiring observation ...	247	228	142	119	97	115	3	2	489	40
ii. Requiring operation ...	131	116	51	61	29	56	2	—	213	2
(c) Glands :										
i. Requiring observation ...	167	160	128	125	84	72	1	—	380	3
ii. Requiring operation ...	—	2	—	1	—	—	—	—	—	—
<b>8. Eyes—</b>										
(a) External Diseases :										
Blepharitis ...	11	21	18	11	20	29	1	—	50	—
Conjunctivitis ...	3	3	2	1	3	6	—	—	8	—
Corneal opacities ...	—	3	3	2	2	1	—	—	5	—
Strabismus ...	57	65	24	24	22	21	4	1	107	1
Other diseases ...	2	2	6	3	5	6	1	1	14	—
(b) Visual acuity :										
Slight defect ...	10	6	36	47	97	122	12	5	155	1
Marked defect ...	4	—	34	35	31	43	9	3	78	—
Recommended for refraction ...	27	20	42	54	87	95	12	8	168	1
Forward ...	1305	1280	996	955	903	1234	71	38	3275	35



Table II.—Continued.

Nature of Defect.	Entrants.		Second Age Group.		Third Age Group.		Fourth Age Group.		All Ages.	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Forward	1305	1280	996	955	903	1234	71	38	3275	3507
<b>Ears—</b>										
(a) Diseases :										
Otorrhoea ...	15	19	13	12	4	23	1	—	33	54
Other diseases ...	72	63	84	51	55	45	3	3	214	162
(b) Defective Hearing :										
Grade I. ...	13	11	7	9	9	13	1	—	30	33
Grade IIa. ...	—	—	2	1	1	3	—	—	3	4
Grade IIb. ...	—	—	—	—	—	—	—	—	—	—
Grade III. ...	2	1	—	—	1	—	—	—	3	1
<b>Speech—</b>										
Defective articulation	23	20	4	7	5	5	—	—	32	32
Stammering ...	4	—	4	1	5	4	1	—	14	5
<b>Mental and Nervous Condition—</b>										
(a) Backward (due to irregular attendance, &c.) ...	7	2	—	1	—	3	—	—	7	6
(b) Dull (intrinsically)	13	8	13	5	22	15	—	—	48	28
(c) Mentally defective (educable) ...	—	3	—	3	2	—	—	—	2	6
(d) (uneducable) ...	7	2	—	—	—	—	—	—	7	2
(e) Highly nervous or unstable ...	4	6	3	3	1	1	—	—	8	10
(f) Difficult in behaviour ...	4	6	—	—	—	—	—	—	4	6
<b>Circulatory System—</b>										
(a) Organic Heart Disease :										
Congenital ...	8	8	4	2	1	1	—	—	13	11
Acquired ...	6	5	6	7	6	10	—	—	18	22
(b) Functional conditions ...	19	11	7	6	8	14	1	—	35	31
<b>Lungs—</b>										
Chronic bronchitis ...	28	11	12	6	13	8	—	—	53	25
Suspected tuberculosis ...	2	2	1	—	2	2	—	1	5	5
Other diseases ...	40	44	25	17	12	11	2	—	79	72
<b>Deformities—</b>										
(a) Congenital ...	23	19	7	10	12	5	1	—	43	34
(b) Acquired (infantile paralysis) ...	1	1	3	1	1	1	—	1	5	4
(c) Acquired (probable) rickets ...	42	27	18	6	16	15	2	1	78	49
(d) Acquired (other causes) ...	55	46	51	39	54	35	4	1	164	121
Infectious Disease ...	3	1	—	1	—	2	—	—	3	4
Other Diseases or Defects ...	83	76	39	53	27	47	1	1	150	177
TOTAL	1779	1672	1299	1196	1160	1497	88	46	4326	4411



TABLE IV.

Return of all Exceptional Children of School Age in the Area.

Disability.	At Ordinary Schools.	At Special Schools or Classes.	At no School or institu- tion.	Total.
Blind— ... ..	—	1	—	1
Partially sighted—				
(a) Refractive errors in which the curriculum of an ordinary school would adversely affect the eye condition ... ..	18	—	—	18
(b) Other conditions of the eye, <i>e.g.</i> , cataract, ulceration, &c., which render the child unable to read ordinary school books or to see well enough to be taught in an ordinary school ... ..	2	—	2	4
Deaf—				
Grade I. ... ..	72	1	—	73
Grade IIa. ... ..	23	—	—	23
Grade IIb. ... ..	6	—	—	6
Grade III. ... ..	7	4	2	13
Defective Speech—				
(a) Defects of articulation re- quiring special educa- tional measures ... ..	203	1	—	204
(b) Stammering requiring special educational meas- ures ... ..	51	—	—	51
Mentally Defective (Children between 5 and 16 years)—				
(a) Educable (I. Q. approx. 50-70) ... ..	46	111	11	168
(b) Uneducable (I. Q. gen- erally less than 50) ...	1	2	22	25
Epilepsy—				
(a) Mild and occasional ...	16	—	1	17
(b) Severe (suitable for care in a residential school) ...	1	3	3	7
Physically defective (Children between 5 and 16 years)—				
(a) Non-pulmonary tuber- culosis (excluding cer- vical glands) ... ..	14	—	1	15
(b) General orthopaedic conditions ... ..	451	2	6	459
(c) Organic heart disease ...	80	—	1	81
(d) Other causes of *ill- health ... ..	19	2	16	37
Multiple Defects— ... ..	1	—	2	3

Definition of ill-health—"Children who by reason of ill-health are unable to attend ordinary schools or are incapable of receiving proper benefit from the instruction in ordinary schools."

### Medical Treatment.

There was no change in the number of clinics (24) for the treatment of minor ailments. While facilities for treatment are satisfactory in most of the clinics, the following clinics must be considered as outstandingly unsatisfactory—St Andrews, Auchtermuchty, Blairhall, and East Wemyss.

The following is a list of clinics with the facilities for treatment available :—

(a) *North-East Fife—*

- |                                  |   |
|----------------------------------|---|
| (1) Cupar—(Castlehill) ... ..    | Minor ailments, orthopaedic, dental and eye. This is a new clinic allowing for increased facilities in treatment and examination. |
| (2) Tayport—(Welfare Clinic) ... | Minor ailments, orthopaedic, dental and eye.  |
| (3) Newburgh—(School) ... ..     | Minor ailments, dental and eye.   |
| (4) Ladybank—(School) ... ..     | Minor ailments, dental and eye.   |
| (5) St Andrews—(Burgh School)    | Conditions here are highly unsatisfactory but conditions allow for some dental and eye treatment.                                 |
| (6) Anstruther—(Welfare Clinic)  | Minor ailments, orthopaedic, dental and eye.  |
| (7) Auchtermuchty—(Town House)   | Dental. Cramped unsatisfactory quarters.  |

(b) *Kirkcaldy Landward—*

- |                                |  |
|--------------------------------|--|
| (1) Methil—(Barrie Street) ... | Minor ailments, orthopaedic, dental, eye—including orthopaedic, artificial sunlight therapy. |
| (2) Leven—(Welfare Clinic) ... | Dental.  |
| ,, —(Parkhill School) ...      | Minor ailments.  |
| (3) Methilhill—(School) ... .. | Minor ailments and dental.   |
| (4) East Wemyss—(School) ...   | Minor ailments and dental. Cramped quarters.   |
| (5) Markinch—(Welfare) ... ..  | Minor ailments, orthopaedic, dental and eye.   |
| (6) Leslie—(School) ... ..     | Minor ailments and dental.   |
| (7) Auchterderran—(School) ... | Minor ailments, dental and eye.  |
| (8) Kinglassie—(School) ... .. | Minor ailments and dental.   |
| (9) Lochgelly—(Welfare) ... .. | Minor ailments, orthopaedic, dental, eye—including orthopaedic therapy, artificial sunlight. |
| (10) Crosshill—(School) ... .. | Minor ailments and dental.   |
| (11) Burntisland—(School) ...  | Minor ailments, orthopaedic, dental and eye.   |

(c) *Dunfermline Landward—*

- |                                |   |
|--------------------------------|---|
| (1) Cowdenbeath—(Welfare) ...  | Artificial sunlight.  |
| ,, —(School) ... ..            | Minor ailments, dental and eye—including orthoptic therapy. |
| (2) Kelty—(School) ... ..      | Minor ailments, dental and eye.                             |
| (3) Crossgates—(School) ... .. | Minor ailments and dental.                                  |
| (4) Inverkeithing—(School) ... | Minor ailments, dental and eye.                             |
| (5) Torryburn—(School) ... ..  | Minor ailments, dental and eye.                             |
| (6) Blairhall—(School) ... ..  | Minor ailments and dental. Unsatisfactory.                  |

Arrangements are also made for orthopaedic treatment at the school clinic in Dunfermline Burgh. This is attached to Canmore school (Old Queen Anne). Here also eye refractions can be done.

### Minor Ailments.

The work at the minor ailments clinics necessitated 2,152 visits by the nurses (1,725 by Welfare and 427 by District Nurses). The number of children treated at these clinics was 11,124, and they made all 47,267 attendances.

Treatments were also, in rural areas, given to children in their homes. The number of such home treatments was 411.

In the case of the two large Burghs the total figures are as follows :—

Kirkcaldy	1,658 children.	6,180 attendances.
Dunfermline	4,355 „	19,857 „

The figures for the number of cases and treatments given at the various clinics are given in the appended tables.

The “ dirt ” conditions—head vermin, scabies, and impetigo contagiosa—all of which showed definite increases during the war years, all registered decreases, particularly the latter two. It was, therefore, possible to close down the First Aid Posts at Buckhaven, Overkeithing, Lochgelly, and Torryburn, where special arrangements had been made for the treatment of cases of scabies, and to refer them for treatment to the ordinary minor ailment clinics.

During 1946, a number of school children (470) received a first immunising injection against diphtheria and 445 received a second injection. In addition, 2,592 received a third or boosting dose.



# Minor Ailments—1945-46—Cases.

	Blairhall	Inverkeithing	Crossgates	Cowdenbeath	Kelty	Lumphinnans	Ballingry	Auchterderran	Markinch	Burntisland	East Wemyss	Methilhill	Buckhaven	Aberhill	Leven	Cupar	Newburgh	St Andrews	Tayport	Total for County	Kirkcaldy Burgh	Dunfermline Burgh	TOTAL including 2 Large Burghs
Head Vermin	—	25	—	9	—	62	59	54	3	15	—	39	39	81	58	—	—	—	—	444	—	20	464
Body Vermin	—	—	—	—	—	—	—	—	—	—	—	2	—	—	1	—	—	—	—	2	—	11	62
Ringworm (Scalp)	—	20	—	5	—	41	65	82	3	2	7	1	18	55	4	3	1	—	3	9	114	165	610
Scabies	8	8	—	25	—	—	—	—	—	—	—	7	2	—	1	—	—	—	—	331	8	—	34
Uncleanliness	—	—	—	1	—	80	53	57	6	49	52	87	42	206	44	15	4	18	21	26	212	409	1606
Impetigo Contagiosa...	4	26	26	83	112	26	22	57	8	27	2	3	3	6	15	—	1	—	32	985	88	509	747
Other Skin Conditions	1	3	3	18	—	42	21	6	2	2	50	14	22	35	29	—	—	—	15	237	45	88	370
Otorrhoea	—	30	14	48	2	25	78	13	25	2	28	20	20	46	31	2	3	—	15	443	50	145	638
Eye Diseases	—	3	—	11	4	27	72	26	9	9	57	39	19	26	39	5	1	—	4	314	3	102	419
Ear Cases	15	31	—	7	—	27	16	2	2	4	10	28	3	—	12	—	—	—	—	282	610	892	145
Nose and Throat Cases	32	1	—	174	—	4	26	12	1	48	—	243	7	13	29	1	—	—	151	282	—	610	419
Other Cases	62	20	56	74	4	169	26	12	1	304	388	243	7	13	29	1	—	—	151	282	247	815	1978
Cuts and Bruises	1060	83	57	126	450	335	96	256	11	11	340	342	120	21	28	51	12	29	143	3786	360	670	4816
Septic Conditions	599	71	51	126	188	308	2	111	19	92	221	235	340	330	54	83	3	18	74	2925	427	645	3997
Accidents	25	—	9	—	6	6	15	3	3	29	29	29	—	2	2	20	—	—	—	140	17	—	157
Advisory Cases	26	—	11	29	—	—	—	3	3	7	22	—	—	—	12	10	—	—	—	124	45	—	169
Atropine	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	—	—	—	—	9	—	—	9
T. B. Inunction	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
Artificial Sunlight	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	166	166
TOTALS	1842	321	231	610	763	1097	435	623	59	613	887	1096	634	822	368	190	25	65	443	11124	1658	4355	17137

## Minor Ailments—1945-46—Attendances.

	Blairhall	Inverkeithing	Crossgates	Cowdenbeath	Kelty	Lumphnans	Ballingry	Auchterderran	Markinch	Burntisland	East Wemyss	Methilhill	Buckhaven	Aberhill	Leven	Cupar	Newburgh	St Andrews	Tayport	Total for County	Kirkcaldy Burgh	Dunfermline Burgh	TOTAL including 2 Large Burghs
Head Vermin ..	300	156	—	14	—	363	867	260	26	149	—	242	116	389	212	—	17	—	—	3111	—	69	3180
Body Vermin ..	—	—	—	—	—	—	—	—	—	—	—	2	45	4	5	—	—	—	—	2	309	107	506
Ringworm (Scalp) ..	2	—	—	10	—	—	653	—	—	—	—	22	18	91	11	6	—	—	7	90	600	543	2922
Scabies ..	49	107	—	52	—	183	93	554	12	2	15	15	1	—	4	—	1	12	—	1779	26	—	236
Uncleanliness ..	36	60	—	1	—	602	742	352	22	133	161	345	114	683	228	40	12	156	58	5320	881	2655	8856
Impetigo Contagiosa ..	41	133	—	371	374	76	742	—	32	73	5	22	25	50	50	—	2	—	103	1567	380	2840	4787
Other Skin Diseases ..	76	37	338	71	84	500	149	—	32	24	215	51	793	133	287	—	—	—	—	2383	740	852	4175
Otorrhoea ..	48	145	284	296	79	191	37	—	—	74	131	74	241	171	171	2	9	7	54	3684	181	526	4391
Eye Diseases ..	52	274	614	40	118	651	859	94	3	32	92	107	19	71	96	11	1	41	14	1708	30	308	2046
Ear Cases ..	42	238	—	12	—	564	125	240	—	7	14	58	3	30	30	—	—	—	—	455	—	823	1278
Nose and Throat Cases ..	56	11	—	174	—	96	6	—	7	119	—	536	14	31	91	1	—	—	156	3754	774	1858	6386
Other Cases ..	140	492	650	425	8	710	340	34	7	626	553	672	283	47	73	110	20	233	286	11659	827	2867	15353
Cuts and Bruises ..	2086	818	148	—	640	1576	2018	1426	44	255	1414	636	1026	1028	156	219	8	169	146	10596	1376	3698	15670
Septic Conditions ..	112	646	299	550	418	1561	168	708	77	47	—	88	—	25	—	2	32	—	—	412	11	—	423
Accidents ..	43	—	9	—	—	4	141	14	7	38	22	—	—	—	13	13	—	—	—	170	45	—	215
Advisory Cases ..	28	—	11	35	—	—	—	38	3	7	—	—	—	—	56	—	—	—	—	56	—	—	56
Atropine ..	—	—	—	—	—	—	—	110	—	—	—	—	—	—	—	—	—	—	—	111	—	—	111
T. B. Inunction ..	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2711	—	2711
Artificial Sunlight ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS ..	4111	3117	3107	2051	1721	6714	6444	3873	233	1548	2622	2854	2695	2746	1485	434	70	618	824	47267	6180	19857	73304

### Minor Accidents in Schools.

The total number of minor accidents requiring first-aid treatment was 11,985. This was an increase in the number (11,120) for 1944-45. Of these, 1,472 occurred in gymnasia or places used for gymnastic purposes; 3,589 in classrooms; and 6,924 in the playgrounds or outside the school buildings.

In the classrooms, of 3,589 accidents, 1,529 were due to cuts and bruises, 318 to splinters, 315 to burns, 1,229 to sickness or fainting, 41 to fits, and 157 to other causes. The figures for cuts and bruises as well as for sickness and fainting were both increases on the preceding year's figures (1,464 and 911 respectively). Schools showing outstanding figures were Viewforth (302 cuts and bruises, 114 burns); Dunfermline High (234 sickness); Kirkcaldy High (92 cuts and bruises, 128 sickness); Buckhaven High (78 sickness); Wemyss Academy (76 cuts and bruises; 46 burns).

Accidents in gymnasia (1,472) showed a definite increase on last year's figures (1,082) and the main cause (77 per cent.) was injury by splinters from floors. The schools chiefly affected with splinter accidents were:—Buckhaven High—innumerable; Ballingry, 184; West Wemyss, 120; Pittenweem, 83; Kennowie, 64; and Aberhill, 66. In Buckhaven High School most of the splinters came from the central hall which is used as a boys' gymnasium as well as dining hall and general purposes hall.

The number of accidents occurring outside the school buildings (6,924) was practically the same as that for last year (6,918). The largest percentage (86) of accidents occurring in playgrounds was due to cuts and bruises. The schools with outstanding numbers of such accidents were:—Blairhall, 263; Pathhead, 241; Dysart, 232; Lochgelly R. C., 160; Strathmiglo, 206; Ballingry, 147; Pittenweem, 147; Auchterderran South, 135; Buckhaven, 116; and another five schools with about 100. In the case of Rosyth R. C. School the figure given was "innumerable."

In conclusion it should be mentioned that while these figures give some indication of the number of accidents which took place, in quite a number of schools the records were obviously lower than what was to be expected from the size of the school and the conditions in or around it. On the whole, however, there is every reason for appreciation of the help given by the headmasters and teachers in first-aid work.

### Major Accidents.

The number of major accidents occurring at schools has advanced from 92 in 1944-45 to 146 in 1945-46. Of these accidents, 4 occurred in gymnasia, 16 in the classrooms, and 116 outside the school buildings.

### County Dental Scheme.

The dental treatment of school children forms the bulk of the work of the area dentists—six in number, assisted by six dental

endants. Most of the dental work is done in the twenty-two dental clinics—5 very good, 14 good, 3 poor. Arrangements are, however, being made for dental facilities to be available at Leslie and Kinglassie Schools.

The dental areas with their school populations and available clinics are as follows :—

WEST FIFE—MR E. B. WIGHT, L.D.S. (Ed.).—The school populations are Kelty, 1,175 ; Inverkeithing, 690 ; Crossgates, 747 ; Dunfermline Landward, 278 ; Carnock, 797 ; Torryburn, 986. Total, 4,673.

The clinics are (1) *Kelty*—Passably equipped. A larger clinic with more up-to-date equipment is required.

(2) *Crossgates*.—Conjoint clinic with minor ailments—well equipped.

(3) *Inverkeithing*.—Conjoint clinic with minor ailments—well equipped.

(4) *Torryburn*.—Conjoint clinic with minor ailments—well equipped.

(5) *Blairhall*.—Conjoint clinic with minor ailments—very inadequate and unsatisfactory.

There are also ten rural or semi-rural schools which require to be visited for treatment.

COWDENBEATH AND AUCHTERDERRAN—MISS A. DOUGARY, L.D.S. (Ed.).—The school populations are Cowdenbeath, 3,332 in 6 schools ; Auchterderran, 1,660 in 5 schools. A total school population of 4,992. There is also a rural school—Chapel.

The clinics are : (1) *Cowdenbeath*—attached to St Columba High School. This clinic is well furnished but is too small for the work to be done.

(2) *Auchterderran*.—Attached to Junior Secondary School. Is well furnished but on small side.

Arrangements are being made for dental treatment to be available at Kinglassie School. The room set aside is being furnished with a dental chair.

LOCHGELLY AND BURNTISLAND—MISS E. CLARK, L.D.S. (Ed.). The school populations are : Lochgelly, 1,762 in 5 schools ; Burntisland, 1,050 in 4 schools ; Crosshill, 1,390 in 4 schools. A total school population of 4,202.

The clinics are : (1) *Lochgelly*—Self-contained with attached recovery room. Furnished with dental unit and up-to-date equipment. It is also used as a centre for general anaesthesia.

(2) *Burntisland*.—Dental unit and up-to-date equipment.

(3) *Crosshill*.—Conjoint clinic with minor ailments. Well equipped.

IV. BUCKHAVEN AND LEVEN—MR A. BLACK, L.D.S. (Dundee). The school populations are: Buckhaven, 4,082 in 7 schools; Leven, 1,153 in 2 schools; Elie—rural area—approx. 250 in 6 schools. A total population of 5,485.

The clinics are: (1) *Methil*—Barrie Street Welfare Clinic—Self-contained with waiting and recovery room. Dental unit and up-to-date equipment.

(2) *Buckhaven*.—Attached to school—dental equipment requires to be renewed. Otherwise reasonably satisfactory.

(3) *Leven*.—Welfare Clinic—Up-to-date dental equipment.

(4) *Elie*.—School staff room—not satisfactory.

V. MARKINCH—WEMYSS—ANSTRUTHER—MR T. McLEOD, L.D.S. (Ed.). The school populations are: Markinch, 1,520 in 6 schools (3 of these are rural); Wemyss, 773 in 3 schools; Anstruther, about 1,000 in 5 schools. There are also no schools at Balcurvie and Kennoway with a school population of 475. The total school population is about 3,768.

The clinics are: (1) *Markinch*—Welfare—Dental unit and up-to-date equipment.

(2) *Wemyss*.—East Wemyss School—Conjoint with minor ailments. Inadequate space and insufficient equipment.

(3) *Methilhill*.—School—Conjoint with minor ailments. Can be considered satisfactory.

(4) *Anstruther*.—Welfare—Equipment can be considered satisfactory.

Arrangements are being made for a conjoint clinic with dental equipment at Leslie J. S. School.

VI. NORTH-EAST FIFE—MRS M. McQUITTY, L.D.S. This consists of areas of Cupar (12 schools—10 rural); St Andrews (13 schools—9 rural); Newport (5 schools—2 rural); Newburgh (4 schools—3 rural); Falkland (6 schools—2 rural); Ladybank (5 schools—3 rural). The total school population is 10,200 (of which at least 1,555 is rural).

The clinics are: (1) *Cupar*—Self-contained with dental unit and up-to-date equipment. Room should be enlarged.

(2) *St Andrews*.—Dental chair and engine crammed into totally inadequate space. Very unsatisfactory.

(3) *Tayport*.—Up-to-date equipment. Can be considered as reasonably satisfactory.

(4) *Newburgh*.—Conjoint with minor ailments clinic. Reasonably well furnished. Requires electric power for electric engine.

(5) *Auchtermuchty*.—Town Hall—A makeshift arrangement which cannot be considered satisfactory.



(6) *Ladybank*.—School—Conjoint with minor ailments clinic. Needs more furnishing—otherwise passable.

There are 4 rural schools in the Anstruther-Colinsburgh districts. They have a school population of 130.

To meet the dental needs of this wide spread semi-rural and rural area, the solution may be the provision of a mobile unit.

The purpose of the Dental Scheme is to ensure the inspection the teeth of all school children once yearly but so far this has not been possible owing to insufficiency of dental staff. Every attempt is made nevertheless to inspect as many as possible of the school children yearly, especially during the first six years of school life.

In the year 1945-46, 10,541 children were inspected by the dentists. This number was particularly low and was due to a number of changes in the dental staff. At these inspections it was found that 3,620 children had sound teeth—this is about 34 per cent. of those inspected. During the war years there had been a gradual increase in the percentage of children with sound teeth—11 per cent. in 1939-40 to 33 per cent. in 1944-45. The percentages varied in different areas—Cupar (including St Andrews, Newburgh, &c.), 43·5; Markinch (including Methilhill, Anstruther, East Wemyss), 35·6; Buckhaven (Leven), 35·6; Cowdenbeath (including Auchterderran), 27·1; Dunfermline Landward (including Kilty, Inverkeithing, Crossgates, Torryburn, and Carnock), 24·9; and Lochgelly (including Crosshill and Burntisland), 16·9.

#### Dental Inspections—1945-46.

Age	N. E. Fife	Buckhaven and Leven	Markinch and Wemyss	Lochgelly and Burntisland	Cowden- beath and Auchter- derran	Kelty and West Fife	Total
5	541	396	90	153	198	114	1492
6	488	309	117	167	128	114	1323
7	444	253	159	142	214	135	1347
8	422	256	107	113	179	54	1131
9	499	156	82	169	162	58	1126
10	506	162	81	129	185	49	1112
11	408	149	65	137	146	67	972
12	389	127	49	107	343	20	1035
13	302	100	26	75	232	26	761
14	37	51	26	37	66	9	226
15	6	—	—	—	10	—	16
Total	4042	1959	802	1229	1863	646	10541
with sound teeth... ..	1762	698	286	208	505	161	3620
requiring treat- ment... ..	2280	1261	516	1021	1358	485	6921
who accepted treatment ...	1141	506	261	562	746	388	3604
own dentist ...	1132	673	254	372	569	96	3096
untreated or refusing ...	7	82	1	87	43	1	221

The number of parents accepting dental treatment on behalf of their children at the school clinics was 3,604 or 52·3 per cent of those referred for treatment—6,921. This acceptance rate is the highest recorded during the past ten years. In the three pre-war years it was about 40-45 per cent. During the war years it varied from 42 to 49 per cent. The number refusing dental treatment was 221—was relatively low. A number of parents changed their attitude following correspondence emphasising the need for dental treatment, and stressing that refusal was tantamount to technical neglect.

The total number of children treated in Fife was 9,185 and 4,000 of these were treated at rural schools. Of the 8,751 treated at school clinics 1,583 were casual cases—usually coming only for extraction treatment.

The number of treatments given was 18,444. This was a very high figure, due in the main to changes of staff occasioning periods during which dentists were not available in certain areas. The number of extractions and conservative treatments for the various clinics is as follows :—

	Extractions.		Conservative Treatments.	
	Temporary Teeth.	Permanent Teeth.	Temporary Teeth.	Permanent Teeth.
Anstruther ...	72	13	182	103
Anchterderran ...	555	155	366	330
Auchtermuchty ...	50	7	18	50
Blairhall ...	58	10	27	39
Buckhaven ...	58	9	159	190
Burntisland ...	108	12	247	201
Cowdenbeath ...	1291	735	576	1115
Crossgates ...	100	11	180	65
Crosshill ...	151	15	279	140
Cupar ...	219	15	178	142
East Wemyss ...	132	11	405	104
Elie ...	21	0	71	14
Inverkeithing ...	172	21	204	180
Kelty ...	182	29	121	138
Kinglassie ...	131	44	92	69
Ladybank ...	30	10	19	29
Leslie ...	124	6	324	70
Leven ...	158	10	342	130
Lochgelly ...	203	27	247	260
Markinch ...	128	23	403	17
Methilhill ...	287	15	428	13
Methil ...	239	36	665	47
Newburgh ...	93	10	35	5
St Andrews ...	236	32	180	16
Tayport ...	69	34	36	6
Torryburn ...	175	29	103	9
Country Schools ...	672	46	614	22
	<u>5714</u>	<u>1365</u>	<u>6501</u>	<u>477</u>

From these figures it will be seen that a larger amount of conservative work was undertaken compared to extractions. The

percentage was roughly 39 for extractions and approximately 58 for conservative treatment. In addition, there was about 3 per cent. of other treatments which can also be included under conservative treatment, such as orthodontia, crown and temporary fillings. This increasing amount of conservative work has been going on during the war years and, as an example, in the year 1940-41 the percentage of treatment, consisting of removal of teeth, amounted to over 45 per cent. as against 50 per cent. for conservative treatment.

The following is an analysis of the figures for treatment done in the school clinics. The number of extractions without anaesthetics (local or general) was 90. Of the teeth extracted under local anaesthetic, 4,662 were temporary and 1,033 were permanent teeth. Those extracted under a general anaesthetic numbered 16. The percentage of extractions to the total number of dental treatments was 38·3.

In the case of conservative treatments, the analysis of the figures is as follows:—The number of dressings was 1,018 (of which 753 were in permanent teeth). The total number of fillings inserted into teeth was 3,693—of these 2,446 were for permanent teeth. Silver nitrate was applied to 4,061 temporary and 160 permanent teeth. On the other hand scaling of teeth (removal of "tartar") was done on 286 temporary and 736 permanent teeth. In addition there were 570 other dental operations, such as regulation of teeth with faulty placement (orthodontia), temporary fillings, &c.

One significant feature of the dental scheme has been the relative frequency with which the staff remove to other authorities. In the Annual Report for 1936 it was shown that for the years 1924-1930 there were 9 dentists with an average tenure of office of about 2 years and 7 months. Between 1930 and 1936 there were 10 dentists with an average of 1 year 9 months. Since 1939 there have been 22 dentists with an average service of 2 years and 5 months. These last figures do not include four of the present staff.

These frequent changes are not conducive to a well-defined and efficient service despite the fact that the County have been on the whole very fortunate in their dental appointments. The outcome has been uneconomic in that in most cases when the dentists have gained initial experience and have become likely to be of value to the Local Authority they left. Furthermore, the changes do not encourage a ready response in the school population as children are naturally suspicious of a new and young dentist.

The reasons for the departure of dentists varied. The main reason, however, was lack of a salary scale. It is of importance that this should be corrected as soon as possible. The upward trend of salaries in other occupations must not be overlooked nor the higher remunerations offered south of the Border. There is

likely to be increased demand for dentists in the near future by an inadequate supply for a number of years.

The number of clinics which have been established certainly offer an attraction to dentists in Fife and the furnishing of some fourteen of them with electric engines, water spittoons, and modern dental chairs offer facilities for good sound work.

In addition to the dental treatment of school children, facilities exist for the treatment of pre-school children and expectant and nursing mothers. The number of pre-school children brought for treatment has never been high and during the year it was very low—43. The treatment given was divided between extraction (84) and conservation (85). The number of expectant and nursing mothers was also low—19 cases who made 83 attendances. Most of the treatment here was extractions—140 (37 with general anaesthesia), followed by the insertion of dentures—15 upper and 16 lower. There were also some conservative dental treatments (38).

The social service officers referred 21 persons for dental treatment. These cases made 86 attendances and 101 teeth were extracted—12 of these under a general anaesthetic. The number of conservative treatments totalled 64. In addition these cases were supplied with 20 upper and 18 lower dentures, as well as partial dentures. Two dentures had to be repaired.

The number of members of the County Police who applied for dental treatment by the County Dental Staff was 18. They made 42 attendances. The dental treatment consisted of 20 extractions, 72 conservative treatments, and the insertion of 4 upper, 5 lower, and 2 partial dentures. One denture required to be repaired.

## Eye Clinics.

### COUNTY.

School and pre-school children with suspected errors of refraction are examined by most of the area medical officers at the following clinics:—Torryburn, Dunfermline (Canmore School), Cowdenbeath, Kelty, Lochgelly, Auchterderran, Burntisland, Markinch, Methil, Anstruther, St Andrews, Cupar, Tayport, Newburgh, and Ladybank. The number of clinics held was 17. The number of children examined was:—pre-school, 35; school, 547; and there were 67 re-examinations.

An analysis of the conditions found are given in the following table:—

Hypermetropia	...	...	...	...	177
Myopia	...	...	...	...	30
Hypermetropic astigmatism	...	...	...	...	184
Myopic astigmatism	...	...	...	...	52
Mixed astigmatism	...	...	...	...	25
Anisometropia	...	...	...	...	50
Other conditions	...	...	...	...	64

---



---

582



As a result of these examinations glasses were prescribed for pre-school and 194 school children. Nine children were sent to the minor ailments clinics for treatment there.

Cases requiring more expert advice were referred to the specialist clinics.

#### LARGE BURGHS.

In the two large burghs, Kirkcaldy and Dunfermline, the number of children examined was 178 (8 clinics) and 149 (29 clinics) respectively. At Dunfermline there were also 147 re-examinations.

In an analysis of the 149 new cases the conditions found were as follows :—

Hypermetropia	...	...	...	...	38
Myopia	...	...	...	...	13
Hypermetropic astigmatism	...	...	...	...	49
Myopic astigmatism	...	...	...	...	7
Mixed astigmatism	...	...	...	...	10
Anisometropia	...	...	...	...	1
Other conditions	...	...	...	...	31
					<hr/> 149 <hr/>

#### Eye Specialist Clinics.

School and pre-school children requiring the advice of an eye specialist were referred by the Area Medical Officers to one of the two County Eye Specialists—Dr Allister MacGillivray and Dr R. D. Leeds. The former was responsible for the clinics in Kirkcaldy and East of Fife ; the latter for those in the Dunfermline and Kirkcaldy Landward areas.

The number of children seen by these eye specialists was :—

Dr MacGillivray—in 21 clinics—340 school and 40 pre-school children (of these 205 cases were re-examinations).

Dr Leeds—in 24 clinics—346 school and 59 pre-school children (of these 230 were re-examinations).

In the following table is given an analysis of the refractive conditions found in the children examined :—

#### Analysis of New Eye Cases.

		West Fife.	East Fife.	Total.
Hypermetropia	...	66	44	110
Myopia	...	7	9	16
Hypermetropic astigmatism	...	53	62	115
Myopic astigmatism	...	11	11	22
Mixed astigmatism	...	6	15	21
Anisometropia	...	4	2	6
Other conditions	...	25	13	38
No. of cases	...	<hr/> 172 <hr/>	<hr/> 156 <hr/>	<hr/> 328 <hr/>

Dr A. MacGillivray in his Ophthalmic reports states :—

“ During session 1945-46 I attended 21 clinics, and 340 school children as well as 40 pre-school children examined at the routine



school clinics. Hypermetropic astigmatism was the predominant error of refraction, and I am glad to say that only 9 cases of myopia were discovered.

"Once again I should like to stress the importance of providing a new and adequately equipped clinic at St Andrews, where conditions are extremely uncomfortable both for the oculist and patients alike."

Dr C. R. D. Leeds also draws attention to the small number of myopic cases which "are comparatively few, there being only 1 in 172 cases. I do not remember having seen any over 10 Dioptres during the year. The number of squints forms a fairly high proportion, and these are cases that treatment will undoubtedly help."

As a result of the examinations by the eye specialists the following number of children had glasses prescribed for the correction of errors of refraction :—

	West Fife.	East Fife.
School children ... ..	181	203
Pre-school children ... ..	26	20
	<hr/>	<hr/>
	207	223
	<hr/>	<hr/>

There were 17 children referred to the minor ailments clinic for treatment of eye conditions, and 1 child was referred to the family doctor. There were 29 children recommended for supervision of the educational arrangements and one child was referred for education in a school for the Blind.

The eye specialists also attended special clinics for the examination of cases being dealt with under the Orthoptic Scheme. The number of clinics held and the children seen was :—East Fife 2 clinics and 31 school and 9 pre-school children. Most of these were re-examinations. West Fife—5 clinics and 87 school and 9 pre-school children. In all 50 cases were prescribed glasses.

In an analysis of the new cases (9) it is to be noted that 6 had hypermetropia and 3 hypermetropic astigmatism. There were no cases of "shortsight."

### **Orthoptic (Correct Sight) Scheme for "Squinters."**

The Orthoptic Scheme, under which Miss Halliday acted as orthoptist under the supervision of the Eye Specialist, Dr Lee, was continued as in previous years. The centres at which this special kind of treatment was given were at Dunfermline, Cowd-beath, Lochgelly, and Methil.

During the year 128 new cases were seen in addition to the 11 brought forward from the previous year. Of the new cases, 11 were found on examination to have no strabismus, and 5 others were found to be unsuitable for orthoptic treatment. The conditions found in the remaining 102 were as follows :—

Left Concomitant Strabismus	...	...	...	51
Right	„	„	...	34
Alternating Strabismus	...	...	...	11
Left Concomitant Divergent Strabismus	...	...	...	2
Right	„	„	...	3
Alternating Divergent Strabismus	...	...	...	1

---

102

---

In the following table the number of cases, attendances, and treatments are given for the four clinics :—

	Dun-fermline.	Cowden-beath.	Lochgelly.	Methil.	Total.
Cases ... ..	63	63	118	179	423
No. of orthoptic treatments ... ..	568	291	142	258	1259
No. of examinations ... ..	19	11	30	71	131
No. of attendances for cases under observation ... ..	142	91	127	171	531
No. of attendances of cases for 'occlusion' ... ..	26	46	80	100	252
	<hr/> 755	<hr/> 439	<hr/> 379	<hr/> 600	<hr/> 2173

As a result of treatment, of the 423 cases six were discharged improved. This improvement was effected by operative treatment. Twenty-nine cases were discharged as cured following operative treatment. The number of children discharged as unsuitable was twenty-six. The reasons for their being unsuitable were given as—seven left the district before treatment was completed ; eleven failed to attend regularly ; six would not wear the occluder ; one showed no improvement despite wearing of an occluder ; and one could not wear glasses.

At the end of the year the following number of children were carried forward to the next year for further treatment—Dunfermline, 50 ; Cowdenbeath, 54 ; Lochgelly, 101 ; Methil, 157 ; a total of 362.

At the end of November Miss Halliday terminated her services at the County as a whole-time member of the staff. She, however, continued on a part-time basis, but the treatment of cases had to be limited to the clinics at Cowdenbeath and Lochgelly. It is much to be regretted that the West of Fife (Dunfermline) and Buckhaven areas had unavoidably to be deprived of the valuable services of Miss Halliday. Unfortunately, prospects of extending the scope of the Scheme are not bright since throughout the country trained orthoptists are relatively few in number.

### Report by Dr. C. R. D. Leeds on Strabismus Operations.

“ Five cases of squint were operated on during 1946. In each case a tenotomy of the medial rectus and a tenotomy and advance-

ment of the lateral rectus were performed. Four of these cases were operated on for a cosmetic result. One case had false projection which could not be broken down with treatment, and which it was hoped might develop some true binocular vision after operation. The operation was successful in putting the eye to within five degrees of being straight. The child left the district before a full and final estimation could be made, but an excellent cosmetic result was obtained.

"Of the other four cases, three had excellent cosmetic results, two were perfectly straight, and one within ten degrees. The fourth case did not resume treatment immediately after operation and although practically straight when discharged from hospital later the eye was found to have deviated inwards to twenty to twenty-five degrees. Treatment is still being carried out, and a further operation will be considered.

"To sum up, of the five cases, three had excellent results, one good, and one slightly improved."

### **Ear, Nose, and Throat Scheme, 1945-46.**

Under this scheme children found to have defective hearing at routine medical inspections, or suspected by teachers or parents to be so affected, were referred to the Ear, Nose, and Throat Consultant, Dr Malcolm Farquharson, who also saw children who showed symptoms of enlargement of tonsils and adenoids. Many of these latter cases were referred by family doctors for operative treatment. The number of referred cases was so great and the facilities for operative treatment so limited that it was found necessary to grade the children into more urgent cases for whom early treatment was called for, cases which could be held over and cases in which the indications were that the condition was only temporary.

During the school year 1945-46 the specialist attended at thirty-six clinics and examined 170 pre-school children, 817 school children and 12 Public Assistance Cases. The number of children specially examined was 121. Ten children were referred to the Consultants by the Speech Therapists and 139 (8 pre-school and 131 school children) were specially examined for hearing.

Following the examinations it was found necessary to recommend 635 cases for removal of tonsils and adenoids. There were 17 children for whom other operative treatment was necessary: one case was referred to Edinburgh Royal Infirmary for a radical mastoid operation. Many cases had the Eustachian tubes inflated and one sublingual cyst was removed. There were 17 children admitted to the Royal Infirmary and to the Throat Infirmary, Edinburgh, for proof puncture of the Antrum, whilst 10 cases had pus washed out of the sinuses. In addition, 8 cases were admitted to these institutions for dissection of tonsils—this applied to children in the older age groups or those unsuitable for the guillotine method.

Many cases were referred to the County Clinics for treatment—6 for treatment for their ears ; 35 cases, mostly suspected to have sinus trouble, were referred for radiographs. Nasal drops were prescribed in cases of sinusitis and 13 children were advised to have special exercises.

There were 21 children who required speech therapy and these were referred to the Speech Therapist.

Special educational arrangements were necessary in the case of two children where advice was given regarding placing in the class ; and four were recommended for education in a school for the Deaf. There were 15 cases continued for further observation and supervision.

Mr I. Malcolm Farquharson, Aural Consultant, reports as follows on the year's work :—

“ During the school year 1945-46, 36 clinics were held in East and West Fife. 1,120 children were examined in all—170 pre-school, 817 school children, 12 special cases, and 121 re-examined.

Of these 987 children, 40 per cent. had enlarged adenoids and 35 per cent. hypertrophied or infected tonsils.

Sinusitis was diagnosed radiologically in 22 per cent. of children but pus was evacuated from these sinuses in only 8 per cent.

This discrepancy can be explained by the fact that in children the lining of the sinuses shares in the defensive reactions of the upper respiratory tract, but the precise relationship with the inflammatory reactions of the lymphoid tissue is uncertain. Ten cases of atrophic rhinitis were met with, 8 in girls, 2 in boys, and 1 case of unilateral choanal atresia.

Investigation is at present being carried out in the clinics on the subject of mouth breathing, as it has been noticed that this occurs in many children in whom adenoids are not present, and it is suggested that persistent mouth breathing is not necessarily a single defect due to post-nasal obstruction but a general failure of development of neuromuscular activity.

Special breathing exercises were employed in early cases of nasal obstruction due to adenoid hypertrophy. It was found that young children obtained considerable benefit, and operative removal was not necessary.

Likewise, ultra violet therapy was given to children troubled with repeated attacks of tonsillitis (in which the tonsils appeared to be clean between attacks). Results were very variable, but results suggested that in the younger age groups it was worth a trial. In tuberculous adenitis a course of ultra violet light treatment was always given before removal of the primary focus in the tonsils after operation. This has given excellent results.

Five cases of tuberculous otitis media were met with ; all these cases were given ultra violet light radiation. In all these cases the disease became quiescent. In clinics without ultra violet light lamps calciferol tablets were given by mouth to cases of tuberculous adenitis. The results were encouraging but inferior to ultra ray therapy.

A dull mental attitude as a primary rather than a secondary factor should not be overlooked.

Children with malrelated jaws and malposed teeth are frequent sufferers. The problem is therefore one for the rhinologist and orthodontist.



In this year a closer liason was started between the aurist and the orthodontic dental surgeon as it was felt that by this means many of the problems involved in the mechanism of nasal obstruction and mouth breathing would be dealt with more satisfactorily.

The prevention of deafness is the subject which occupies priority of thought at the clinics.

In case-taking many parents are found to be deaf and in suppurative otitis media striking examples of a hereditary tendency have repeatedly been seen.

A surprisingly large number of children are found, often accidentally, to be totally deaf in one or both ears. Investigation into the subject suggests that the aetiology of the condition is either congenital, lack of development or the mother had rubella during her pregnancy, or the child was adventitiously deaf from meningitis or mumps.

It is in the treatment of suppurative and non-suppurative otitis media that so much can be done for the young if seen early, as there is little doubt that many cases of progressive deafness that become manifest in adult life have their inception in neglected eustachean tube and middle ear infections in infancy and childhood. An endeavour is made at the clinics to keep these cases under observation until there is reasonable certainty that normal hearing is established.

In all cases of repeated attacks of suppurative and non-suppurative otitis media the adenoids are removed and any sinusitis dealt with.

Weekly inflation of the eustachean tube is carried out.

A favourable start has been made with audiometric testing of deaf children, but so far this has been confined to cases in which hearing cannot be improved and educational difficulties have arisen.

This test has been found suitable only for children over the age of 10.

The gramophone audiometer is the most accurate for use in children, the pure tone audiometer being too complex in use for them.

Hearing aids for use in the school room have been issued to one or two but suitable models are difficult to obtain.

It cannot be too strongly stressed that understanding on the part of the teacher is one of the most important factors in teaching the deaf child.

The lack of non-residential schools and teachers of the deaf in the County is a great hindrance to progress in this work.

A plea is made for greater facilities for out-patient treatment in the outlying areas, as only by this means can the problem of the running ear be dealt with.

Regarding the indications for removal of tonsils and adenoids, it must be stressed that each case must be judged on its merits and not by rule of thumb. The general indications are :—

- (i) Recurrent otitis media when not due to sinusitis.
- (ii) Persistent cervical adenitis and latent T.B. (3p.c.).
- (iii) Repeated tonsillitis especially associated with systemic upset.
- (iv) Quinsy.
- (v) Cases referred by physician and orthopaedic surgeon, &c.

Naturally, repeated tonsillitis is and always will be the biggest group both from the point of view of the preservation of health and educational necessities.

Reviewing cases at the clinics since adopting this scheme the results have fully justified my belief in its clinical soundness.



In connection with the operative work undertaken at Cameron Hospital, 702 cases were operated upon for removal of tonsils and adenoids or adenoids only. This figure does not represent one year but an accumulation from the previous year owing to the closing down of the hospital.

In 1945-46 no deaths occurred at or following the operations and no case developed chest complications. 0·6 per cent. of the cases developed otitis media as a complication. There was mild post-operative haemorrhage in 3 cases, and secondary haemorrhage in one case. Pus was found behind the tonsil in very many cases where a quinsy was unsuspected."

### Orthopaedic Scheme.

Children, pre-school and school, with crippling conditions were referred to the orthopaedic clinics at Lochgelly, Methil, Dunfermline, Markinch, Burntisland, Crossgates, Cupar, Anstruther, St Andrews, and Tayport. The whole-time clinic staff consisted of one orthopaedic nurse (Miss Booth) and one physiotherapist (Mr Moig). They were assisted by a part-time staff—several physiotherapists and several teachers on the gymnastic staff who were attached to the two larger clinics, Lochgelly (Miss Foggo) and Methil (Miss Hogarth). Two of the physiotherapists were only employed for one to three months and the third (Mrs Kydd), who took up part-time duty in May, 1946, was responsible for the physiotherapeutic treatment in the East of Fife remedial clinics (Cupar, Tayport, and St Andrews).

All the children attending the remedial clinics were seen by the orthopaedic surgeon, Mr Robert Stirling, who was assisted by members of the staff attached to the Princess Margaret Rose Hospital, Edinburgh—Messrs E. L. Farquharson, E. A. Jack, and G. W. Baker.

#### Cases seen at Orthopaedic Clinics.

Clinic.	No. of Cases on Register Jan., 1946.		New Cases.		No. of Cases discharged.	
	P.S.	Sch.	P.S.	Sch.	P.S.	Sch.
Methil ...	36	86	53	92	36	101
Lochgelly ...	67	90	48	86	53	95
Dunfermline ...	11	30	13	14	13	26
Markinch ...	11	10	17	4	13	9
Burntisland ...	8	13	14	11	11	12
Crossgates ...	—	—	5	7	1	1
St Andrews ...	6	12	11	19	4	13
Tayport ...	7	14	5	8	5	7
Anstruther ...	18	15	22	11	18	13
Cupar ...	19	17	13	13	11	12
Totals ...	183	287	201	265	165	289

The orthopaedic clinic at Crossgates had been in abeyance during the war. It was re-opened in May, 1946, but closed again

in November. The cases were then treated at Dunfermline. It will be noted that pre-school children form a fair proportion—about 40 per cent.—of the total. Every effort is made to discover children with physical defects at as early a date as possible in order to commence treatment which will prevent the development of more crippling conditions. The percentage (50) of children discharged is relatively good considering that staffing difficulties prevented full treatment being given to each child.

The number of children kept under regular supervision was 148 (53 pre-school and 95 school). Poor and irregular attendances were made by 140 children. This number would probably have been smaller if more frequent clinic sessions had been possible.

In view of the reduced staff only a limited number of cases could be visited at home—there were 171 such cases and the staff made 255 visits to them. (In 1945 there were 144 domiciliary cases and 178 visits).

During 1946 the total number of clinics held was 567 (as against 657 in 1945). The following table records the number of treatments given at the various clinics :—

				Pre-School.	School Children.
Methil	...	...	...	836	1132
Lochgelly	...	...	...	1339	1712
Dunfermline	...	...	...	271	444
Markinch	...	...	...	310	182
Burntisland	...	...	...	391	337
Crossgates	...	...	...	58	58
St Andrews	...	...	...	276	370
Tayport	...	...	...	164	210
Anstruther	...	...	...	435	162
Cupar	...	...	...	448	358
				<hr/> 4528 <hr/>	<hr/> 4965 <hr/>

The total number of children treated in 1945 was 5,074 pre-school and 6,010 school.

The conditions for which children were treated were as follows :—congenital deformities, 47 ; poliomyelitis, 7 ; other forms of muscular paralysis, 16 ; rickets, 119 ; tuberculosis, 12 ; arthritis and rheumatism, 4 ; injuries, 11 ; pes cavus, 34 ; pes planus, 107 and other conditions, 52.

Children who required operative treatment were admitted to the Princess Margaret Rose Hospital, Edinburgh. The total number of children sent there during the year was 121. Twenty five cases were continued from 1945, 22 children were re-admitted to the Hospital for further operative treatment, and the number of new cases was 74. The total cost for Hospital treatment was £5,402.

In addition one case was treated at Challenger Lodge at a cost of £69. This included a retaining fee of £4 5s paid to Challenge

odge while the girl was having operative treatment at Fairmilehead Hospital.

In the following appendix the relative figures are given for the war years. These were omitted in the report for that period.

Children on the County Orthopaedic register who were admitted to Princess Margaret Rose Hospital, and for whose maintenance the County Council accepted liability :—

	No. carried forward from previous year.	New Admissions.	Re-admissions.	Cases still in Hospital at end of year.
939	34	35	9	14
940	14	18	7	14
941	14	31	5	14
942	14	51	9	20
943	20	45	12	30
944	30	20	3	14
945	14	45	12	24

The cost to the County Council for the maintenance and treatment of these patients was as follows :—

1939	...	£2,391	7	3	1940	...	£1,536	12	1
1941	...	2,070	12	8	1942	...	3,088	0	0
1943	...	3,463	4	5	1944	...	2,125	6	5
1945	...	3,687	3	0					

In addition, one orthopaedic case was admitted to the East Park Home for Infirm Children in 1944. After a stay of four months the child was removed by the parents. The maintenance cost for this case was £17 6s 6d.

Mr Stirling, County Orthopaedic Surgeon, has submitted the following note on the year's work :—

" During 1946 there was an increase in the number of the physiotherapeutic staff, and the effect was soon apparent in the working of the clinics, and abundantly demonstrated the truth of the statement that 'the worth of any orthopaedic scheme can be judged by the efficiency of its clinics.'

" If a clinic system is efficient it is possible to return, from the parent hospital, cases, which were admitted for manipulation or operation, at a comparatively early stage of their convalescence, for the after treatment can be carried out satisfactorily at the clinics or in the patients' homes. This releases beds for other children so that there is never a long waiting list. On the other hand, if the clinic system is not efficient the patients have to be retained longer in hospital, and so the waiting list mounts. This side of the work of the clinics is important, dealing as it does with the care of cripples, but the other side of the work, the prevention of cripples, is almost more important, and it cannot be carried out in any orthopaedic scheme without a good clinic service. The preventative side deals with static conditions, such as early knock knees, bow legs, flat feet, curvatures of the spine and the like, which, if they are treated in time will result in a very high percentage of complete return to normality. If they are not treated early they result in a greater or lesser degree of cripple-dom, which may require operative correction in adolescence or may manifest itself by arthritic conditions in adult life. It is interesting to note that in 1946 over 90 per cent. of the work in the clinics was devoted to this type of case, and that the results on the whole were very satisfactory.

"Though there has been an improvement since the war years there is still need for a further increase of the physiotherapeutic staff, and the number of clinic sessions. An increase of the staff would make it possible for more home visits to be made. Such visits are, of course, essential if the patient cannot be brought to the clinic, but they are also very profitable in keeping relatives up to scratch in supervising home exercises. This is of particular value in static cases, when two or even three visits a week to the clinics may lead only to a slow improvement unless the exercises or manipulations are supervised or carried out frequently by the parents as well. A home visit from the physiotherapist stimulates, and makes it less likely that parents and child will 'grow weary in well-doing.'

"It is fortunate this year that there were few cases of infantile paralysis.

"Under the present system the pre-school child and the school child can be treated adequately, but the orthopaedic treatment of adults is still very unsatisfactory. In many areas of the country after-treatment is impracticable for traumatic and rheumatic cases. The Red Cross Mobile Units have done very valuable work, and it is hoped that with the establishment of static adult clinics and the closer integration of the mobile units that this need may be met."

### Speech Therapy.

For the County of Fife there are four speech therapists employed by the Education Authority. They are responsible for cases in the following areas:—(1) Kirkcaldy and Burntisland; (2) Buckhaven-Methil, Leven, and Wemyss; (3) Cowdenbeath, Kelty, Lochgelly, Glenraig, and Crossgates; (4) North-East of Fife.

During the year the work of the staff was interrupted by changes in the staff, necessitating two new appointments and the transfer of the speech therapist from the Cowdenbeath to Buckhaven Area.

The number of children treated was 555 (Cowdenbeath, 143; Kirkcaldy, 145; Buckhaven, 154; and North-East Fife, 123). The main conditions for which treatment was given were—stutterers 137; defective articulation, 388; defective speech with cleft palates, 15; other defects of speech, 15. The distribution of the stutterers was as follows:—Cowdenbeath, 33; Kirkcaldy, 45; Buckhaven, 37; and North-East Fife, 22. The number of children treated in 1944-45 was 450.

Despite the staff changes already referred to, the results of the treatment must be considered as definitely satisfactory. The number of children discharged as cured was 136 (120 in 1944-45) and there were 18 discharged as unsatisfactory. There were 14 children who discontinued treatment by leaving the County.

The total number of treatments given by the speech therapist was 10,660. The figures for the four areas were Cowdenbeath 1,134; Kirkcaldy, 3,183; Buckhaven, 3,771; and North-East Fife, 2,572. The total figure for 1944-45 was 11,122.



### Mentally and Physically Defective Children.

#### (a) *Special Schools and Classes.*

The following were the numbers of children on the rolls of the various Special Classes in September, 1945 :—

Castlehill ... ..	21
Buckhaven Primary ... ..	32
Eastbank ... ..	46
Lochgelly East ... ..	28
M'Lean ... ..	39
	<hr/>
	166

During the year, 71 children were admitted to these classes and 38 discharged.

#### (b) *Institution Cases.*

In September, 1945, the following number of children from Fife were in various institutions :—

Baldovan (M.D.) ... ..	2
Larbert (M.D.) ... ..	9
St Joseph's, Rosewell (M.D., R.C.) ... ..	6
Waverley Park Home (M.D.) ... ..	5
Royal Blind Asylum, Edinburgh ... ..	12
Donaldson's Hospital (Deaf), Edinburgh ... ..	18
Royal Institution for Deaf, Edinburgh ... ..	—
Institution for Deaf, Dundee ... ..	6
East Park Home for Infirm Children ... ..	—
Lauder Road Home (Cripples) ... ..	—
St Vincent's School, Glasgow ... ..	3
Colony School, Bridge of Weir ... ..	1
Rubislaw-Ruthrieston Special School, Aberdeen ... ..	1
Lennox Castle, Lennoxtown, Glasgow ... ..	1
Scotsraig School, Murrayfield, Edinburgh ... ..	—
Trefoil Residential School, Polkemmet House, Whitburn ... ..	3
St Charles Certified Institution, Carstairs ... ..	1
Rudolph Steiner School, Camphill, Milltimber, Aberdeenshire ... ..	1
	<hr/>
	69

During the year further 15 children were admitted and 5 discharged, and thus the total at the end of the session was 79.

Under the Blind Persons Acts, 1920 and 1938, the Education Committee was responsible for the training of persons at Edinburgh Royal Blind Asylum. At September, 1945, there were 3 trainees in Edinburgh.

### Physical Education and Personal Hygiene of Children.

The scheme of work followed was much on the same lines as during the war years. With the return of teachers from the Forces a more comprehensive scheme of physical education can be developed.

The group remedial work in a few schools was continued but in others interruptions and deficient recording of cases rendered results unsatisfactory for publication.



The use of spray baths in the various schools equipped for this purpose was also very much interrupted, and some of the schools (10) were not able to arrange for children to make use of them. In the other schools (7) only limited information was available as the records kept were unsatisfactory. The approximate total number of spray baths given was somewhere in the region of 12,000 and about 1,400 children took advantage of the baths.

The Education Committee appointed a Supervisor of Physical Education in the summer term. Mr David Wilson prepared the following brief report on physical education. It was necessarily brief because he commenced his duties only a few months before the close of the session.

"My first duty is to pay tribute to the work of my predecessor, the late Mr A. W. George, Fife County's first Organiser of Physical Education. Although his post had remained unfilled during the war years, it was at once obvious to me on taking over that much had been done, particularly in creating enthusiasm among non-specialist staff, giving them a broader conception of the meaning and scope of modern Physical Education as distinct from the mechanical 'Drill' of bygone years. All subsequent visits to schools have revealed to me that Mr George was held in high esteem throughout the County, not merely for his technical ability, but for his many admirable personal qualities of mind and character.

"The closing months of the session were spent largely in school visitation not only to meet head teachers and specialist physical education staff, but also to survey the facilities available, *e.g.*, playgrounds, playing-fields, gymnasia, games equipment, &c. It will be possible to report on these matters in detail after a longer period of service in the County, but perhaps two matters already call for attention. These are (1) the removal of air-raid shelters from playgrounds already too cramped in some instances, and (2) the necessity for a new drive to encourage the regular use of spray baths which for various reasons were restricted or cut out during the war years.

"It may be said, however, that despite the many restrictions and limitations imposed by the war, physical education in the school appears to have received due attention, and with the return of the younger teachers from the services, many fitter in body and broadened in experience, and all enthusiastic to resume their peace-time vocation there seems good reason to suppose that an enhanced standard of physical education will result."

### **Mothercraft Classes.**

The scheme of work for the teaching of "mothercraft" was continued during 1945-46, and eight welfare nurses were responsible for the teaching of this subject as an addition to their work as health visitors and school nurses. The nurses, knowing the homes of the girls whom they taught, were all the more able to give point to their instruction. The nurses and the schools in which they taught were as follows:—(1) Nurse Wilson—High School and Viewforth J. S. School, both in Kirkcaldy; (2) Nurse M'Lean—Queen Anne School and St Margaret's School in Dunfermline; (3) Nurse Black—Oakfield J. S. School, Kelty and Ballingry School; (4) Nurse Dougall—Mos-

side J. S. (girls), Cowdenbeath ; (5) Nurse Kinnear—Buckhaven High School ; (6) Nurse Meldrum—Aberhill J. S. School ; (7) Nurse Bisset—Leven J. S. School ; (8) Nurse Conway—St Andrews Burgh School. In the case of Buckhaven the classes were taken over from Nurse Simpson. In the following table the number of classes and girls receiving instruction are given :—

School.			No. of Classes.	No. of Girls.
Kirkcaldy High	...	...	4	67
Viewforth J. S. ...	...	...	3	53
Queen Anne J. S.	...	...	4	64
St Margaret's J. S.	...	...	2	24
Oakfield J. S. ...	...	...	2	35
Ballingry J. S. ...	...	...	4	76
St Columba High	...	...	3	41
Moss-side J. S. ...	...	...	10	165
Buckhaven High	...	...	3	42
Aberhill J. S. ...	...	...	5	71
Leven J. S. ...	...	...	6	73
Burgh School, St Andrews	...	...	2	24
			<hr/> 48	<hr/> 735

### Infectious Diseases in Schools.

The following table shows the number of cases of infectious diseases in schools as recorded in Head Teachers' attendance returns during the year :—

School Management Areas.	Measles.	Scarlet Fever.	Diphtheria.	Mumps.	Whooping Cough.	Other Infectious Diseases.	Scabies.	Other Contagious Diseases.	TOTAL.
CUPAR ...	...	4	3	2	58	108	43	36	277
ST ANDREWS ...	...	171	5	9	43	318	14	41	645
ANSTRUTHER ...	...	191	—	—	51	43	8	23	322
WEMYSS ...	...	167	49	6	213	206	42	41	771
KIRKCALDY ...	...	149	30	7	279	201	58	159	966
BEATH ...	...	115	41	21	140	288	111	137	949
DUNFERMLINE ...	...	305	6	55	226	517	114	165	1463
TOTALS	...	1102	134	100	1010	1681	390	602	5393

## The Treatment of School Children in Dunfermline.

The following report was prepared by the late Dr Harry Emslie Smith, Administrative Medical Officer, Carnegie Dunfermline Trust :—

“ As noted in previous reports, most of the Clinic accommodation in Dunfermline was taken over by the Department of Health for Scotland to form part of Inglis Street Emergency Hospital. The Clinic work was, however, carried on without interruption, although under considerable difficulty. During the year under review, Inglis Street Hospital was closed, and in September, 1945, it was found possible again to re-open the Dunfermline Clinics in their pre-war accommodation.

**General Clinic.**—An examination of the records for the past year shows a satisfactory increase of 1,024 new cases and 2,114 attendances as compared with the previous year. The increase was general both in Inglis Street and Rosyth Clinics. It is satisfactory to note that the number of scabies showed a slight decrease.

**Ear, Nose, and Throat Clinics.**—There was a considerable increase in the number of cases attending these Clinics. During the year Dr Nesbitt held eleven clinics.

**Orthopaedic Clinics.**—During the years of the War, the work of the Orthopaedic Clinic has developed in importance, and it is a matter of great satisfaction that Mr Robert I. Stirling, F.R.C.S., Chief Surgeon at the Princess Margaret Rose Hospital for Crippled Children, Fairmilehead, Edinburgh, has found it possible to undertake the conduct of these Clinics, in succession to the late Mr W. A. Cochrane. Mr Stirling held his first Clinic on 16th October, 1945, and three other Clinics during the year. There was a large increase in the number of new cases and in the number of re-examination of old cases.

**Defective Speech Clinic.**—The Trustees were fortunate in being able to secure the services of Miss Norah Wood to carry on the Speech Clinics in succession to Miss Margaret Fleming who retired in April. Miss Wood has for several years assisted Miss Fleming in her pioneer work of Speech Training and is thoroughly conversant with Miss Fleming's methods.

**Dental Clinics.**—The report of the Dental Surgeon on the year's work is included.”

### Minor Ailments (General Clinics), 1945-46.

The following tables give the number of cases treated during the year at Dunfermline and Rosyth.

Any child returning after a month's unprescribed absence was considered to be a new case, as were children returning after an interval with a different defect.

## Return of Cases Treated.

					INGLIS STREET CLINIC.			
					No. of Cases.		No. of Attendances.	
EAR—								
Middle Ear Suppuration ...	...	...	...	...	69		807	
Other Conditions ...	...	...	...	...	80	149	275	108
NOSE AND THROAT—								
Nasal Conditions ...	...	...	...	...	228		363	
Sore Throat ...	...	...	...	...	3		2	
Other Throat Conditions ...	...	...	...	...	288		325	
Speech Defects ...	...	...	...	...	15	534	50	74
EYE—								
Blepharitis ...	...	...	...	...	14		138	
Styes ...	...	...	...	...	25		97	
Conjunctivitis ...	...	...	...	...	39		176	
Corneal Inflammation and Ulcera- tion ...	...	...	...	...	1		4	
Injuries ...	...	...	...	...	9		20	
Errors of Refraction ...	...	...	...	...	—		—	
Other Conditions ...	...	...	...	...	12	100	21	45
SKIN (Head)—								
Dirty ...	...	...	...	...	18		67	
Ringworm ...	...	...	...	...	4		83	
Impetigo ...	...	...	...	...	40		473	
Other Conditions ...	...	...	...	...	5	67	59	68
SKIN (Body)—								
Body Vermin ...	...	...	...	...	—		—	
Impetigo ...	...	...	...	...	207		1580	
Scabies ...	...	...	...	...	136		489	
Ringworm ...	...	...	...	...	4		19	
Molluscum ...	...	...	...	...	2		14	
Other Conditions ...	...	...	...	...	242	591	1422	35
GENERAL—								
Septic Sores ...	...	...	...	...	335		2380	
Injuries ...	...	...	...	...	303		1445	
Other Conditions ...	...	...	...	...	590		1368	
Sunlight ...	...	...	...	...	166	1394	2711	79
						2835		143



## Return of Cases Treated.

## ROSYTH CLINICS.

				No. of Cases.	No. of Attendances.	
EAR—						
Middle Ear Suppuration	...	...	...	19	45	
Other Conditions	...	...	...	22	33	
					41	78
NOSE AND THROAT—						
Nasal Conditions	...	...	...	29	31	
Sore Throat	...	...	...	5	5	
Other Conditions	...	...	...	39	44	
Defective Speech	...	...	...	3	3	
					76	83
EYE—						
Blepharitis	...	...	...	6	15	
Styes	...	...	...	8	20	
Conjunctivitis	...	...	...	21	21	
Corneal Inflammation and Ulcera- tion	...	...	...	—	—	
Injuries	...	...	...	4	5	
Errors of Refraction	...	...	...	1	1	
Other Conditions	...	...	...	5	8	
					45	70
SKIN (Head)—						
Dirty	...	...	...	2	2	
Ringworm	...	...	...	—	—	
Impetigo	...	...	...	9	26	
Other Conditions	...	...	...	3	12	
					14	40
SKIN (Body)—						
Body Vermin	...	...	...	—	—	
Impetigo	...	...	...	153	576	
Scabies	...	...	...	29	54	
Ringworm	...	...	...	3	5	
Molluscum	...	...	...	2	5	
Other Conditions	...	...	...	255	1328	
					442	1968
GENERAL—						
Septic Sores	...	...	...	310	1318	
Injuries	...	...	...	367	1422	
Other Conditions	...	...	...	225	490	
					902	3230
Totals—Rosyth Clinics	...	...	...	1520	5469	
Add—Inglis Street Clinic Totals	...	...	...	2835	14388	
Total No. of School Children	...	...	...	4355	19857	
Add—Pre-School Children Inglis Street	...	...	...	474	1415	
„ do. Rosyth Clinics	...	...	...	47	107	
GRAND TOTAL				4876	21379	

## Diseases of the Ear, Nose, and Throat.

The following table shows the distribution of new cases :—

	Inglis Street Clinic.	Rosyth Clinics.	Pre-School Age.
Ear ...	149	41	26
Nose and Throat ...	534	76	94

The number of attendances for treatment amounted to :—

School Children ... ..	1983
Children of Pre-School Age ... ..	92
	<hr/>
	2075
	<hr/>

### Affections of the Ear.

190 school children attended at Dunfermline and Rosyth Clinics on account of diseases of the ear.

*Otitis Media*.—88 cases of otitis media in school children were treated.

The figures for the two types of the affection are :—

Acute Otitis Media ... ..	23
Chronic Otitis Media ... ..	65

### Affections of the Nose and Throat.

610 new cases in school children were treated.

The following table gives the nature and distribution of the cases in the various groups :—

Nose—	Inglis Street Clinic.	Rosyth Clinics
Catarrh ... ..	35	8
Other Conditions ... ..	193	21
Throat—		
Acute Sore Throat ... ..	3	5
Other Conditions ... ..	303	42

As compared with last year, the above figures show an increase of 44 nose and throat affections.

From the year 1942 onwards there has been a steady increase in the number of throat affections other than acute sore throat. The bulk of these were cases of enlarged tonsils, many of which were treated by operation.

*Children of Pre-school Age*.—The following table shows the diseases from which they suffered :—

	Inglis Street Clinic.	Rosyth Clinics
Otitis Media ... ..	9	5
Other affections of the Ear ... ..	10	2
Affections of the Nose ... ..	43	1
Affections of the Throat ... ..	48	2

### Defective Speech Clinic.

REPORT BY MISS MARGARET FLEMING.

During the year the following cases were dealt with :—

Stammerers ... ..	21
Defective Speech ... ..	23
Cleft Palate Speech ... ..	4
Muffled Tone ... ..	2
Backward Speech due to deafness ... ..	1
Difficulty in discriminating between consonants— defective ear ... ..	1
Attendances ... ..	1147

The opening of the session in September was marked by a welcome return to the old quarters at Inglis Street. Although very comfortably and spaciouly housed during the war years at the Carnegie Hall, it is of great advantage to have the Speech Clinic carried on under the same roof as the other school clinics. Routine examination of all cases by the Medical Officer is of immense value in determining at once if any preliminary or particular treatment, other than that of the Speech Therapist, is necessary. From the psychological point of view, it is also good, as it impresses both parents and children with a greater sense of the importance of the attendance and treatment.

The number of cases was up to the usual standard, and attendance throughout the year was maintained very satisfactorily.

There was the usual batch of little people with various articulative difficulties, and some very backward speakers. Most of these were discharged during the session.

Of the cleft palate cases, one—a boy of 5—can now speak very well indeed without trace of nasal intonation, one is progressing very satisfactorily, one has been discharged as having been taken as far as she can be without further operation, and one that ought to do well because of the excellence of the operation but who makes very little progress owing to absolute lack of concentration and will to work.

There was a marked increase of stammering cases during the war years, a goodly number being of children from the South who had suffered badly through bombing raids. An interesting case that is making excellent recovery is that of a boy of 15, born and brought up in Vienna, who had been living under the terror of Nazi occupation. It can be easily understood how stammering arises in such cases. Fear makes all of us catch and hold our breath. Is it to be wondered at if in the case of nervous children being thus frightened again and again, the rhythmic co-ordination of the breath and the tone-production is thrown thoroughly out of gear? The majority of stammers arise from this sense of fear—a bite from a dog, a fright from a fall, erratic home discipline, an over-strict teacher—being afraid of the dark—these are some of the things that may give birth to a stammer, which, if not dealt with at once may become a habit, and, like all other habits, difficult to dislodge. Therefore it cannot be overstressed to parents to bring their stammering children to the Clinic directly the trouble starts.

It will be interesting to note if, with the coming of Peace, the number of stammering cases tends to decrease.

### **Eye Clinic.**

145 new cases in school children were treated at the Clinics in Dunfermline and Rosyth. The number of attendances was 526. These figures show an increase of 67 cases of eye affection of school children.

In addition to the above, 5 children of pre-school age received treatment and made 10 attendances.

The following table shows the distribution of the cases and the main classes of the defects treated :—

	INGLIS STREET		ROSYTH.	
	School Children.	Pre-School Children.	School Children.	Pre-School Children.
Blepharitis ... ..	14	1	6	—
Styes ... ..	25	1	8	—
Conjunctivitis ... ..	39	3	21	—
Corneal Inflammation	1	—	—	—
Injuries ... ..	9	—	4	—
Other Conditions ...	12	—	6	—
	100	5	45	—

### Skin Diseases.

The number of new cases of skin affections in school children at all of the Clinics amounted to 1,114. The number of attendances was 6,214. The average number of treatments per case was 5.51.

The number of new cases in infants and children of pre-school age was 104, and the number of treatments 325.

*Impetigo Contagiosa.*—In the year under review, 409 new cases in school children were treated. The number of attendances was 2,655. These figures show an increase of 42 new cases and 60 treatments. During recent years the numbers of impetigo case have been rather high.

In addition to the above, 46 children of pre-school age were sent for treatment. The number of attendances was 177.

*Ringworm of the Head and Body.*—There were 4 cases of ringworm of the scalp and 7 cases of ringworm of the body. This shows a slight increase as compared with last year.

*Warts, Chilblains, and Corns.*—The number of new cases was :—warts, 203 ; chilblains, 14 ; corns, 14.

*All other Conditions*—

*Vermin.*—20 cases of nits and pediculi of the head were sent for treatment during the year, an increase of 3 cases as compared with last year.

*Scabies.*—The number treated was 165, a decrease of 37 cases as compared with last year.

*Children of Pre-school Age.*—104 infants and children of pre-school age were referred to the Clinics for treatment of skin affection.

The following table shows the diseases and the numbers treated—

Impetigo ... ..	46
Scabies ... ..	22
Ringworm ... ..	1
Molluscum ... ..	—
Other conditions ... ..	35
	104

### Defective Teeth.

As in former years, the whole of the primary schools in Dunfermline, numbering seven, were systematically inspected. The pupils of the secondary schools and the advanced division of St Margaret's School are still treated as casual cases. The ages of the children inspected range from 5 to 12 years.

The following table shows the number of children examined in each group, together with the number of children whose dentitions were sound in the corresponding group :—

					No. Examined.	No. with sound Dentitions.
At	5 years	...	...	...	408	206
"	6 "	...	...	...	445	180
"	7 "	...	...	...	345	124
"	8 "	...	...	...	390	153
"	9 "	...	...	...	424	149
"	10 "	...	...	...	394	176
"	11 "	...	...	...	354	188
"	12 "	...	...	...	120	54
					<u>2880</u>	<u>1230</u>

These figures show that 42·71 per cent. of the children examined had sound teeth. As in previous years these children were brought to Clinic for prophylactic treatment.

The following figures show the general state of the teeth as disclosed by examination, and the numbers accepting and refusing treatment :—

					1945-46.	Per cent.
1.	No. Examined	...	...	...	2880	—
2.	No. with sound dentition	...	...	...	1230	42·71
3.	No. requiring treatment...	...	...	...	1650	57·29
4.	No. in 3 accepting treatment at Clinic	...	...	...	1498	90·79
5.	No. in 3 refusing treatment at Clinic	...	...	...	152	9·21

In the following table the 2,880 children are classified according to the number of decayed teeth in the mouth which require attention :—

					NO. OF CHILDREN.		
No. of Decayed Teeth.					Boys.	Girls.	Totals.
0	...	...	...	...	621	609	1230
1	...	...	...	...	243	234	477
2	...	...	...	...	260	258	518
3	...	...	...	...	108	98	206
4	...	...	...	...	132	126	258
5	...	...	...	...	25	31	56
6	...	...	...	...	28	32	60
7	...	...	...	...	4	12	16
8	...	...	...	...	8	13	21
More than 8	...	...	...	...	20	18	38
					<u>1449</u>	<u>1431</u>	<u>2880</u>

### Dental Treatment.

During the year, 2,327 children attended the Clinic for treatment and made 3,506 attendances, an average of 1·51 attendances per child. 2,057 children attended as the result of systematic examina-



tion, and made 2,921 attendances. 270 attended as casual cases and made 585 attendances. 46 of these casual cases were of pre-school age.

The following figures show the treatment carried out throughout the school year :—

				Temporary Teeth.	Permanent Teeth.
Extractions—					
Without local anaesthesia ...				636	5
With local anaesthesia ...				1112	59
Fillings—					
Cement ... ..				1	2
Amalgam ... ..				505	1121
Silicate ... ..				—	289
Root Fillings ... ..				—	83
Crowns ... ..				—	2
Other Operations—					
Silver Nitrate Treatment ...				1640	69
Dressings Inserted ...					403
Scaling and Cleaning ...					1085
Minor Regulation Visits ...					1

The total amount of treatment carried out during the school year was as follows :—

Teeth Extracted ... ..	1812
Fillings Inserted ... ..	2001
Porcelain Crowns ... ..	2
Teeth treated with Silver Nitrate.	1709
Dressings Inserted ... ..	403
Scaling and Cleaning ... ..	1085
Minor Regulation Visits ...	1

### Rosyth Report.

At the beginning of the school year all classes in Rosyth Primary Schools were systematically inspected. The age groups examined were from 6 years to 11 years. Children of 5 years, although not included in the systematic examination, received treatment if desired at the Clinic.

The following table shows the number of children examined in each group, together with the number of children whose dentitions were sound :—

				No. Examined.	No. with Sound Dentition.
At 6 years ... ..	...	...	...	231	96
„ 7 „ ... ..	...	...	...	149	52
„ 8 „ ... ..	...	...	...	210	75
„ 9 „ ... ..	...	...	...	174	71
„ 10 „ ... ..	...	...	...	181	78
„ 11 „ ... ..	...	...	...	138	61
				1083	433

The following figures show the general condition of the teeth as disclosed by examination and the numbers accepting and refusing treatment :—

				1945-46.	Per Cent.
1. No. Examined ... ..	...	...	...	1083	—
2. No. with sound dentition ... ..	...	...	...	433	39.98
3. No. requiring treatment ... ..	...	...	...	650	60.02
4. No. in 3 accepting treatment at Clinic				570	87.69
5. No. in 3 refusing treatment at Clinic				80	12.31

In the following table the 1,083 children are classified according to the number of decayed teeth in the mouth :—

No. of Decayed Teeth.	NO. OF CHILDREN.		
	Boys.	Girls.	Total.
0 ... ..	234	199	433
1 ... ..	91	97	188
2 ... ..	118	120	238
3 ... ..	33	40	73
4 ... ..	43	42	85
5 ... ..	9	8	17
6 ... ..	17	6	23
7 ... ..	5	2	7
8 ... ..	4	2	6
More than 8 ... ..	8	5	13
	<hr/> 562 <hr/>	<hr/> 521 <hr/>	<hr/> 1083 <hr/>

### Dental Treatment.

During the year 770 children made 1,016 attendances, an average of 1.32 attendances per child.

The following figures show the treatment carried out throughout the year :—

			Temporary Teeth.	Permanent Teeth.
Extractions—				
Without local anaesthesia	...	...	263	—
With local anaesthesia	...	...	401	7
Fillings—				
Cement	...	...	—	—
Amalgam	...	...	159	351
Silicate	...	...	—	57
Root Fillings	...	...	—	—
Other Operations—				
Silver Nitrate Treatment	...	...	460	—
Dressings inserted	...	...		50
Scaling and Cleaning	...	...		376

The total amount of treatment carried out throughout the school year was as follows :—

Teeth extracted	...	...	...	671
Fillings inserted	...	...	...	567
Teeth treated with Silver Nitrate	...	...	...	477
Dressings inserted	...	...	...	50
Scaling and Cleaning	...	...	...	376

### Deformities and other conditions Treated at the Remedial Clinic.

Treatment by massage and medical gymnastics, radiant heat, and Faradic electricity was given by the Clinic Masseuse.

Most of the cases of local children on discharge from Fairmilehead Orthopaedic Hospital were sent to attend the Remedial Clinic for further treatment.

*Working Arrangements.*—The Clinic was open daily during school sessions.

Cases are eligible for admission only on the recommendation of their own family doctor.

*Attendances.*—During the year, 173 cases were admitted. The total attendances were 3,324. The average number of treatments per case was approximately 19·21.

*Defects* treated included cases of Postural Round Shoulders; Antero-Posterior Curvature of the Spine; Lateral Curvature of the Spine; Paralysis; Flat Foot; Club Foot; Sprains, Fractures, and Injuries; Rickets and Debility; and other Conditions.

### Orthopaedic Clinic.

These Clinics provide for the examination and treatment of children suffering from physical defects, who require orthopaedic care in addition to what can be done for them by massage and other methods at the Remedial Clinic.

As noted in the introduction to this report, it is a matter of great satisfaction that Mr Robert I. Stirling, Chief Surgeon at the Princess Margaret Rose Hospital, has found it possible to undertake the conduct of these Clinics. Mr Stirling held his first Clinic on 16th October, 1945, and three other Clinics during the year. 41 new cases were examined and 50 old cases re-examined, making a total of 97 examinations. This shows an increase of 60 in the total number of examinations as compared with last year.

Thirteen cases were admitted to Fairmilehead Hospital and four to Peel Hospital, Galashiels.

Treatment by various orthopaedic methods was advised in the case of other children who were seen at the Clinics.

### Artificial Sunlight Clinic.

This Clinic remains open throughout the year, except during the summer months.

Most of the treatment is by a weekly general exposure of the body to a long flame carbon arc lamp, but local applications from a mercury vapour lamp are given in suitable cases.

*Attendances.*—During the year the following children were treated, viz. :—

School Children ... ..	166
Infants and Children under School Age	54
	<hr/>
	220
	<hr/>

The number of treatments given was 3,264, of which 553 were to children under school age. The average number of treatments per case was 14·84.

A large number of children who had been operated on for tuberculous glands of the neck were referred to the Clinic for treatment by Ultra Violet light. The results obtained in these cases were most satisfactory.

## INFECTIOUS AND OTHER DISEASES.

---

The incidence of infectious diseases in Fife during 1946 was comparatively low. No epidemic of any kind threatened, the total number of cases notified being 1,693 as compared with 1,701 in 1945. Both scarlet fever and diphtheria showed a reduction in the number of cases notified. Scarlet fever claimed 485 cases in 1945 and 397 in 1946, a decrease of 88 cases. Diphtheria figures were also satisfactory, and undoubtedly the result of the immunisation campaign which has now been running for the past six years. In 1945 there were 154 cases of diphtheria in the County exclusive of the two large Burghs of Kirkcaldy and Dunfermline, and in 1946 there were 107 cases, a decrease of 47. This decrease in incidence in a deadly infection is gratifying, but the number of cases occurring is still too large in a disease which can definitely be controlled by preventive methods. Reference to this matter will, however, be made later.

The number of cases of pneumonia, both acute primary and influenzal, was greater than in 1945, the figures being acute primary, 328 in 1945 and 454 in 1946, an increase of 126 cases; influenzal pneumonia, 39 in 1945 and 81 in 1946, an increase of 42 cases. The number of pulmonary tuberculosis cases notified was 30 greater than in 1945, but there were 29 fewer cases of non-pulmonary tuberculosis.

Only three cases of para-typhoid fever were notified in 1946 as against 17 in 1945; no cases of typhoid fever were notified.

An unusual case occurred at a farm in Cupar Area of a farm worker who was admitted to hospital suffering from infective jaundice, a disease which is usually due to ingestion of food or drinking water contaminated by rats who are themselves infected by the causal organism. The disease is a well-known occupational hazard occurring among coal miners, sewage workers and fish cleaners, but its occurrence in a farm worker is unusual. The assistance of the Area Advisory Officer, Department of Agriculture, was secured, and rats from the farm in question were sent to the Bacteriological Department, University of St Andrews, for examination. Two of the first three rats caught at the farm were found to be infected. Rats from five surrounding farms and from a neighbouring refuse dump were caught and sent for investigation. Rats from two of these farms were found to be infected. Thereafter the Department of Agriculture undertook an extensive rat destruction campaign at the original and surrounding farms. No further cases occurred.

The attached table shows the cases of infectious diseases notified during 1946 :—

Disease.	East Fife.					West Fife.					Grand Total
	Total	Burghal	Landward	Removed to Hospital	Treated at home	Total	Burghal	Landward	Removed to Hospital	Treated at home	
Cerebro-Spinal Fever ...	1	1	—	1	—	20	7	13	19	1	21
Diphtheria ...	14	10	4	13	1	93	46	47	92	1	107
Dysentery ...	3	—	3	1	2	27	19	8	4	23	30
Encephalitis Lethargica ...	2 *	—	2	1	1	2	2	—	1	1	4
Erysipelas ...	27	18	9	5	22	51	23	28	12	39	78
Jaundice—Acute Infective ...	1	—	1	1	—	1	1	—	1	—	2
Malaria ...	4	—	4	3	1	5	4	1	3	2	9
Ophthalmia Neonatorum ...	14	4	10	1	13	63	28	35	12	51	77
Pneumonia—Acute Influenzal	37	19	18	12	25	44	19	25	31	13	81
Pneumonia—Acute Primary ...	43	30	13	12	31	411	181	230	232	179	454
Pneumonia—Not Notifiable ...	14	9	5	5	9	20	5	15	19	1	34
Puerperal Fever ...	4	4	—	4	—	5	5	—	5	—	9
Puerperal Pyrexia ...	3	3	—	1	2	13	4	9	11	2	16
Scarlet Fever ...	131	72	59	127	4	266	112	154	260	6	397
Tuberculosis—Pulmonary ...	68	39	29	17	51	193	92	101	46	147	261
Tuberculosis—Non-Pulmonary	28	15	13	5	23	82	39	43	16	66	110
Para-Typhoid Fever "B" ...	3	3	—	3	—	—	—	—	—	—	3
TOTALS ...	397	227	170	212	185	1296	587	709	764	532	1693



*Diphtheria Immunisation.*—The national scheme for diphtheria immunisation was continued, and in 1946, 470 schools and 2,434 pre-school children were inoculated. The response of parents to have their children immunised has lessened considerably, and especially is this so with regard to pre-school children. It is in this group that the greatest danger lies, and parents would be well advised to take full advantage of the free facilities afforded at all schools and child welfare centres in the County. Delay in having young children protected against this deadly disease is dangerous, and all parents who have the welfare of their children at heart are urged to seek free immunisation now before it is too late. By far the greater number of diphtheria deaths occur in children under school age. In 1946, there were 91 deaths from diphtheria in Scotland and 58 of these were in children under 5 years of age. Between the ages of 5 and 9 years, there were 18 deaths. It is evident from these figures that increased effort is needed towards immunisation of the pre-school population. The reduction of deaths in this group has been nothing like so great as among school children. Two deaths from diphtheria were recorded in Fife County in 1946, one a child of 4 years who had not been immunised, the other a child of 10 years who had been immunised in infancy. In this connection, it should be noted that the protection afforded the young by immunisation tends to become attenuated after a few years and a further single injection is necessary on entering school. By full immunisation of all children, diphtheria as a cause of death can be definitely stamped out. Failure of the campaign is mainly due to parents who are careless. The grave consequences of their apathy must be stressed. So long as immunisation in the pre-school group remains low, the number of children infected will remain relatively high and death will continue to take its toll.

There were 4,465 live births in the County in 1946. Yet only 2,434 children in the whole pre-school group (under 5 years) were fully protected against diphtheria during the year.

*Whooping-cough Immunisation.*—Free immunisation of young children against whooping-cough was continued in 1946, the number receiving injections during the year being as follows :—

1st Dose.	2nd Dose.	3rd Dose.	4th Dose.
633	578	84	39

The work is being carried out on an experimental basis. Immunisation against whooping-cough has not yet reached the same degree of efficacy as is the case in immunisation against diphtheria. While there have been lapses, results are, however, sufficiently good to encourage continuation of the experiment.

### Tuberculosis.

In the last report a review of the future trend of tuberculosis in Fife was not optimistically outlined, and it is a matter for regret that the forecast has proved correct. As the figures that follow show there has been no reduction either in the incidence of the disease or in the number of deaths. The death rate is practically the same as in 1945 and 1942, and one has to go back to 1932 to find it at a higher level. The main stumbling blocks to improvement—an adequate number of hospital beds and better housing accommodation for a large section of the population—still stand in the way and the chance of early betterment is slight. Full use of the hospitals depends on a sufficiency of nurses: no useful purpose would be served by discussing a problem already so well known, and it will suffice to record that 1946 saw a further deterioration in the nursing service.

The high death rate from tuberculosis, particularly meningeal, in children, the frequency of lung lesions in children and the common occurrence of pleural effusion in adolescents, all indicate a high rate of infection and are disquieting features. Earlier hospitalisation of the open pulmonary case and retention in hospital, or colonisation of the infectious patient, would tend to limit the factor of infection. In the year under review tuberculosis caused more deaths than all the principal epidemic diseases combined. Add to this the prolonged ill-health and degree of permanent invalidism of those who contract the disease, and the consequent economic upset to the families involved, and one gets some idea of the extent of the problem created by the disease.

#### Notifications.

		Pulmonary.				Non-pulmonary.				Total.
		M.	F.			M.	F.			M. and F.
1945	125	<i>113</i>	106	<i>92</i>	77	<i>67</i>	62	<i>60</i>	370	<i>332</i>
1946	133	<i>121</i>	127	<i>108</i>	55	<i>46</i>	56	<i>54</i>	371	<i>329</i>

(Figures in *italics* represent confirmed cases of tuberculosis).

NOTIFICATIONS—Age and Sex Distribution and Site affected in Confirmed Cases.

	-1		1-4		5-9		10-14		15-19		20-24		25-29		30-34		35-39		40-44		45-54		55-64		65-74		75 & over		Total		Total	M & F.
	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.		
Pulmonary ...	1	2	2	3	6	5	6	3	15	21	19	28	21	15	12	12	11	7	4	3	12	4	9	2	3	3	—	121	108	229		
Lymph Nodes ...	—	—	5	5	5	7	7	2	2	—	—	7	—	5	—	—	—	—	—	2	1	3	—	—	—	—	—	20	31	51		
Meninges ...	1	—	4	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	7	3	10		
Abdomen ...	1	—	1	—	1	1	1	1	—	—	—	1	1	2	—	3	—	—	1	—	1	—	—	—	—	—	—	4	11	15		
Genito-Urinary ...	—	—	—	—	—	—	—	—	—	—	1	—	2	1	1	—	1	—	—	1	—	—	—	—	—	—	—	6	1	7		
Knee ...	—	—	1	—	1	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	4			
Hip ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1			
Spine ...	—	—	—	—	—	—	—	1	—	1	1	2	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	4	2	6		
Sacro-Iliac ...	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1		
Lupus ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1		
Other Areas ...	—	—	1	—	—	—	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	4		
TOTAL	3	2	14	8	14	13	14	8	19	26	22	39	24	23	13	15	12	7	4	6	15	8	10	4	3	3	—	167	162	329		

The most obvious feature of the tables is the close approximation of the total notifications for 1946, to those of the previous year. In 1946 there has been an increase in the cases of lung disease and a decrease in the non-pulmonary cases. This may in part be a matter of interpretation of the findings in individual cases, but in the main it represents a true increase. Pulmonary tuberculosis is predominantly an infection with the human type tubercle bacillus and the higher incidence of pulmonary disease points to increased infection. Confirmation is found in the number of cases of lung disease in children—19 in children under 10 years of age and 28 for the whole group under 15 years. On the other hand the notifications for bone and joint tuberculosis in children is surprisingly low: the two cases of tuberculosis of the knee joint were admitted to Sanatorium and after a prolonged period of observation it was decided (in 1947) that they were non-tuberculous. This means no cases of bone and joint disease occurred in children under 15 years—a state so extraordinary that one suspects a failure to notify.

**Deaths and Rate per 100,000 Population.**

	Pul.		Rate Pul.	Non- Pul.		Rate Non- Pul.	Pul. and Non-Pul.		Total	Rate all forms
	M.	F.		M.	F.		M.	F.		
1945	38	37	40	17	12	15	55	49	104	55
1946	46	31	39	14	14	14.1	60	45	105	53.1





Although there was actually one death more in the year under review than in 1945, the death rates were very slightly lower. This is due to a considerable increase in the population as estimated by the Registrar General. The ratio of male to female deaths is 4:3 and for pulmonary cases it is 3:2. This is unusually high and is accounted for by the fact that in the age group 45-54 years, 13 men died and no women. It is customary to get more male deaths in this age group but the complete absence of women is unexpected: it may be a purely fortuitous occurrence. Deaths under 15 years of age are down by two but for children under 5 years, the figure is unchanged at 11 and for all children under 10 years there has been an increase of one. An apparent anomaly in that more children under 5 years are shown as having died from non-pulmonary tuberculosis than were notified under that heading, is explained by the fact that the distribution of deaths is that given by the Registrar General and in some instances deaths were certified as due to meningeal tuberculosis—quite correctly—but, from knowledge that pulmonary lesions co-existed, these same cases had been entered in the notification register as pulmonary tuberculosis. An attempted rigid classification into pulmonary and non-pulmonary is apt to lead to anomalies but it is not a matter of importance. The important feature is that too many deaths occurred in young children. It is an index of our failure to deal with the reservoir of infection.

#### Cases of Tuberculosis—Notification Register.

	Pulmonary.		Non-Pulmonary.		Total.		Total.
	M.	F.	M.	F.	M.	F.	
1945	472	351	230	293	702	644	1346
1946	506	401	217	262	723	663	1386

The high notification rate has led to a further increase of the total number of persons on the Register. Names are taken off the register either when a person dies, recovers, or leaves the County and the removals have not kept pace with the new cases. Partial revision of the register led to a reduction in the total number of non-pulmonary cases but the increase in pulmonary cases more than out-weighs this decrease. It should be understood that not only are there more cases of lung disease than of all other types but the period of observation before they can be regarded as cured is much longer, and such cases tend therefore to form the bulk of the names on the register.

#### Cases Examined.

	New.	Old.	Contacts.	Total.
1945	557	1126	368	2051
1946	506	2047	532	3085

There has been a slight drop in the number of new cases seen by the Tuberculosis Department but a gratifying rise in the supervision of cases already on the register and in the number of contacts examined. The figures do not include those cases receiving out-patient treatment at Glenlomond where they are under regular

supervision, but they do include 200 examinations at Glenlomond of patients either referred there for some particular purpose or attending for supervision after recent completion of treatment. Practically all other recorded examinations were carried out at the patients' homes. With 1,386 notified cases on the register the number of examinations is still low and the supervision of contacts is not as good as one would like, but any increase, with the existing staff and organisation, could be done only at the expense of efficiency.

#### Patients Admitted to Sanatorium.

	Pulmonary				Non-Pulmonary				Non-Tuberculous		TOTAL
	Adults		Children		Adults		Children		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1945	51	50	4	2	4	4	9	4	—	—	128
1946	52	42	6	5	5	6	8	1	2	—	127

The above figures refer only to those patients admitted by the local Authority. At any one time during the year there were from ten to twelve service patients in E. M. S. Hospitals pending transfer to sanatorium. With staff shortage in the Sanatorium and a long waiting list of civilian cases, such transfers were obviously slow. Of the admissions, 110 were to Glenlomond. The remainder were sent to Bridge of Earn Hospital and Tor-Na-Dee Sanatorium with one child admitted to Princess Margaret Rose Hospital, Edinburgh. The "Pleurisy Unit" at Bridge of Earn Hospital continued to serve a useful purpose by admitting uncomplicated cases of pleurisy and thus freeing beds at Glenlomond for more patients. Every effort was made to take as many cases as possible into the Sanatorium, and one can derive some satisfaction from the fact that there was no drop in the admission rate in spite of a general worsening of the nursing problem. There was, however, all too frequently, a long interval between discovery of the case and the institution of treatment and the number on the sanatorium waiting list remained around the 50-70 mark.

#### X-ray Examination.

	Total Examinations.	X-rays of Contacts.	No. of contacts found to have Pulmonary Tuberculosis.
1942	6	—	—
1943	275	47	4 (and four others subsequently developed T. B.).
1944	521	100	5
1945	837	198	12 (and 3 others had involvement of hilar glands).
1946	1122	256	17 (and 5 with gross enlargement of hilar glands).

There has been a steady rise in the number of X-ray examinations each year, and the figure might well be increased further were it not that the time involved in examining the reporting on films enforces some limit. Although not always necessary for diagnosis, it is nearly always required to assess the possibility of treatment and in practice an X-ray examination is seldom omitted in new

cases if the patient is fit enough to make the journey to hospital. Periodic X-ray is also advisable to check the progress of the case, whether the person has had sanatorium treatment or not and bearing in mind that no case of pulmonary tuberculosis may be removed from the notification register as "recovered" in a less period than five years, and that there are at the moment over 900 such cases in the register, the need for a large number of films will be understood.

Of 256 contacts, 22 were found to have pulmonary tuberculosis on routine X-ray examination. This proportion is higher than in former years but it emphasises the importance of the work. In one family, where a girl of 15 years was found with advanced pulmonary tuberculosis, all her brothers and sisters—seven in number—were affected. The home was small and the family badly overcrowded, the risk of heavy infection was high. A brother of 21 years was found with infiltration of the right upper lobe and in this case there was a history of pleurisy three years earlier, suggesting that he was in reality the primary case in the household; a sister of 17 years had a primary infiltration of the left upper lobe; a sister of 11 years had enlarged root glands with suspicious mottling in both mid zones—one month later she had a right-sided pleural effusion and two months later a left-sided pleural effusion; four younger brothers and sisters had enlarged hilar glands and in three of these the enlargement was gross. This instance of familial infection is exceptional but it shows how great is the danger from an open case of tuberculosis. The number of cases of tuberculosis occurring each year in which there is history of family contact far exceeds the number found on routine X-ray examination, and suggests that more frequent examination of contacts would detect some of these cases at an earlier date.

#### Sputum Examinations.

		Number of Specimens.		
		Positive.	Negative.	Total.
Tuberculosis Officer ...	...	18	113	131
General Practitioners	...	16	112	128
Total ...	...	34	225	259

In addition a considerable number of specimens, from cases where the diagnosis was in doubt and where tubercle bacilli had not been found in the sputum, were sent to Glenlomond for culture or guinea-pig inoculation.

#### Treatment Allowances.

	Number granted Maintenance Allowance.	Number granted Discretionary Allowance.	Number granted Special Payments.
1943	28	1	2
1944	56	—	1
1945	51	—	2
1946	46	3	2

The cost of the Scheme for 1946 was £4,151 11s 9d. There has been a gradual increase in the annual cost since the scheme was instituted, but this is understandable as a number of patients and their families have received assistance for eighteen months or more and there is a carry over each year. An increase in the allowance for children also added to the cost: this increase was much needed and was most welcome. Even with this addition the allowances are rather meagre when examined in the light of present day living costs but the scheme fulfils a useful function and has been an undoubted benefit to many families.

### Supply of Drugs and Dressings.

The cost to the County Council of the provision of drugs and dressings to persons suffering from tuberculosis for the year was £126 0s 7½d. This is an increase of £23 10s over the previous year.

### Domiciliary Treatment.

#### SUPPLY OF EXTRA NOURISHMENT.

Thirty-three persons received a free supply of milk or milk and cod-liver oil at a cost of £239 0s 9d. This is a reduction of fully £50 in the cost for 1945.

		<b>Lupus Treatment.</b>		<b>Cost of Lomholt Lamp Treatment.</b>
	<b>No. of Patients.</b>	<b>Cost of Travel.</b>		
1945	8	£188	12 11	£35 6 0
1946	8	196	9 6	28 2 0

This treatment is given at Edinburgh Royal Infirmary, and wherever the patient's financial circumstances do not permit of him meeting the cost himself the County Council does so. The total cost in 1946 shows little variation from the previous year. Patients with lupus must attend several times a week for treatment, and in some instances attendances at Edinburgh Royal Infirmary have been going on periodically for over 20 years. Recently, lupus has been treated with very large doses of calciferol, a vitamin preparation; the reports on this treatment are conflicting but some workers report dramatic improvement, and there have been instances of apparent cure in a few months in previously intractable cases of lupus. A final assessment of the value of this treatment must be delayed for a year or two but there appears little doubt that it has been of great benefit to certain cases, and anything that helps this long-suffering group of people is to be welcomed.

### General Comments on the Tuberculosis Service.

In considering the whole question of tuberculosis, the predominant feeling is one of frustration. That the number of admissions to the sanatorium in 1946 was maintained in spite of a worsening nursing problem gives a certain amount of satisfaction, but a glance at the waiting list and the knowledge that many of these patients will get worse and will infect others while waiting for a bed, brings one back to the grim reality of the position.



Methods of treatment are constantly advancing, but this avails little if the cases cannot get into hospital. At the risk of repetition it must be stated that the crux of the whole problem is lack of nurses. Until the hospitals and sanatoria are fully staffed there is little likelihood of any improvement in either the morbidity or the mortality from tuberculosis. The introduction of part-time nurses—a scheme in which women, either married or single, trained or untrained, do part-time work in hospitals—has been of considerable value, but it is only a temporary expedient and is not a solution. As a method of staffing a hospital remote from a centre of population it brings many administrative problems and can work efficiently only if the hospital has a nucleus of permanent trained staff. The multiple reports on nursing conditions and salaries have had no effect as far as sanatoria are concerned: they failed to recognise that tuberculosis nursing, especially in a rural sanatorium, created a special problem and required additional inducements. The outlook is not bright.

Better housing is the second great stumbling block to improvement. In Fife the different housing authorities assist in re-housing over-crowded families wherever possible but the demand for homes is very great and the assistance of necessity limited. Many cases of tuberculosis are living in over-crowded houses and the risk of infecting other members of the household, especially children, is high. The high incidence of pulmonary and meningeal tuberculosis in children has been causing concern for some time.

As regards the purely domiciliary side of the work, there is nothing to add to what was contained in last year's report. The position has not changed. Any increase in the supervision of patients and contacts depends on the establishment of some dispensary system in the more populous areas.

Much attention is now being paid to rehabilitation of the sick and infirm. Persons suffering from tuberculosis, where they are fit to do light work or part-time work, or who require a course of training to fit them into a new occupation, are reported to the Employment Exchange and the Disablement Rehabilitation Officer attempts to place them in a suitable niche. There is no doubt the Employment Exchanges make a serious effort to place these incapacitated people in suitable jobs, but the task is not easy where tuberculous persons are concerned. Many are fit for only light work and some can be employed only part-time. As a solution to the problem of rehabilitation in tuberculosis the employment exchange can only go a short way. Light work and part-time work mean light pay packets and economic conditions constantly tempt the worker to try more than his physical condition will stand and in the end he breaks down. In other words, many people with tuberculosis, even if the disease has reached the stage of quiescence after treatment, are permanently incapacitated to the



extent of being unable to compete for a living in the ordinary labour market. A second and quite large group consists of those patients in hospital whose disease settles down to a chronic stage but who remain infectious: the number of jobs which are light and in which the person will not be a danger to others are exceedingly few, and these patients have great difficulty in getting employment. Special arrangements are necessary for both these groups and the sanatorium colony with its own industries, and where the patient becomes more or less a permanent resident, is probably the best answer. The outstanding example of a colony is, of course, Papworth: no comparable institution exists in Scotland, which is unfortunate. For each sanatorium to try to colonise certain cases would be difficult and probably uneconomic, but it should be possible to inaugurate some such scheme on a regional basis.

To end on a little more optimistic note—and also to sound a warning—mention is made of that much publicised drug, Streptomycin. Most of the work on this new drug has been done in America, where it was discovered, but trials are in progress in this County now. It is not a cure for tuberculosis, and no such claim has been made for it by its discoverer. It has, however, a very beneficial affect on certain types of tuberculosis, and in the treatment of meningeal and miliary tuberculosis some good results have been obtained. Much more will be necessary in the way of clinical trials before the real value of the drug can be assessed, but it is certainly the most promising of all the drugs tried against the tubercle bacillus, and constitutes the one bright gleam on the horizon.

### Venereal Diseases.

The great bulk of the work is carried out at the Dunfermline and Kirkcaldy Treatment Centres toward which the adjoining populous industrial areas of the County naturally gravitate. Use is made to a much less extent of the excellent facilities available under the Dundee Corporation Scheme.

It is immediately apparent that the first complete year following the cessation of hostilities has brought with it either a continued increase or a sharp resurgence of venereal infection.

In all three Treatment Centres there has been the common experience of increased numbers as the following tables clearly illustrate:—

		Syphilis		Gonorrhoea		Other Ven. Disease		Total Ven. Disease		Non-Ven. Disease	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE	1946	11	10	25	14	8	5	44	29	7	13
CENTRE	1945	6	5	5	25	2	2	13	32	5	14
DUNFERMLINE	1946	48	15	92	18	73	18	213	51	80	30
CENTRE	1945	28	13	40	20	43	16	111	49	49	40
KIRKCALDY	1946	87	42	153	28	103	7	343	77	71	36
CENTRE	1945	33	21	76	29	53	1	162	51	66	54
ALL	1946	146	67	270	60	184	30	600	157	158	79
CENTRES	1945	67	39	121	74	98	19	286	132	120	108

These are gross figures and represent all admissions to the Registers of the respective Treatment Centres throughout the year. If the appropriate deductions are made in respect of cases re-admitted, in the same period, to the Registers, for resumption of treatment in the case of defaulters returning, and in respect of cases transferred from other approved Treatment Centres for continuation of treatment or surveillance, the residue will represent fresh infections.

Thus adjusted the figures for the three Treatment Centres are as follows :—

	Syphilis		Gonorrhoea		Other Venereal Disease		Total Venereal Disease		Non-Venereal Disease	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE TREATMENT CENTRE										
1946	9	8	23	14	8	5	40	27	7	13
1945	4	5	5	24	2	2	11	31	5	14
% Incr./ Decr.	+ 125%	+ 60%	+ 360%	— 42%	+ 300%	+ 150%	+ 264%	— 13%	+ 40%	— 7%
DUNFERMLINE TREATMENT CENTRE										
1946	26	12	60	14	71	18	157	44	70	27
1945	19	12	34	18	43	16	96	46	49	40
% Incr./ Decr.	+ 37%	—	+ 75%	— 22%	+ 65%	+ 12%	+ 63%	— 4%	+ 43%	— 32%
KIRKCALDY TREATMENT CENTRE										
1946	41	30	111	25	92	7	244	62	70	36
1945	10	14	61	26	45	1	116	41	66	54
% Incr./ Decr.	+ 310%	+ 114%	+ 82%	— 4%	+ 104%	+ 600%	+ 110%	+ 51%	+ 6%	— 33%
ALL CENTRES										
1946	76	50	194	53	171	30	441	133	147	76
1945	33	31	100	68	90	19	223	118	120	108
% Incr./ Decr.	+ 130%	+ 61%	+ 94%	— 22%	+ 90%	+ 58%	+ 98%	+ 13%	+ 22%	— 30%

In the report for the years 1939 to 1945 it was pointed out that amongst other factors, the use in treatment of Venereal Disease in service personnel, of modern methods and, in particular, of Penicillin, had, by limiting the period of infectivity, indirectly exercised a profound effect on the war-time increase amongst the civilian population. This increase, substantial though it was, had been notable for its relative moderation and particularly for its unexpectedly short duration, the general trend of figures having shown a progressive decline from a maximum incidence attained during 1942.

That the continued use of similar methods of treatment will, within a short span of years, remove the stain of Venereal Disease from future records of the Public Health is not so certain.

The discipline and ordered life of the Armed Forces provide environmental circumstances which can never have any real counterpart in civilian life and, whilst concealment of infection, delay in treatment and incomplete treatment, must, by their exceptional occurrence in the services, have been the pre-requisite and contributing factors leading, in large measure, to the curtailment of the increased war-time incidence, they are the very factors which will continue now, by their too frequent occurrence in civil life, to limit the usefulness of modern methods of treatment in progressively reducing the general incidence of venereal infection.

In suitable circumstances there can be little doubt that such a steady decline is well within the scope and capability of recent therapeutic methods but, as a disciplined civilian population is in this sense happily but a dream of a few authoritarians, such a decline has no substantial or immediate hope of realisation.

Fresh legislation, rightly considered by many to be long overdue, is not likely ever to reproduce, in a civil population, the favourable environmental circumstances of the services. Indeed, the more drastic the legislative provision, the more likely is wilful evasion to render such provision effectively sterile.

It is possible and indeed probable, that, with the re-organization and other changes which will follow the coming into operation of the Health Service Act, there may develop a better integrated service of diagnosis and treatment, together with a more vigorous and sustained effort to trace infection to its source and pursue infection to its cure. In the immediate future this is perhaps as much as can be expected.

Legislative action and administrative provision are probably both required, each well-conceived and together nicely balanced.

The comparison of the year's figures with those for the previous year, expressed as a percentage increase or decrease, requires no interpretation.

The increase is not small in the case of the major venereal infections, and a decrease falls to be recorded only in female gonorrhoea and in conditions found in females not to be venereal.

It is to be noted that there is now in civilian life, and largely contributing to these figures, a body of young people of both sexes amongst whom, no doubt, there has occurred in the years immediately gone, a certain incidence of venereal infection—one which would not be recorded in civilian statistics. To have any real comparative value, the figures for the two years would require to be related to a common denominator. They are not so related and as the denominator in the year under review has been, by release from the Forces, a steadily growing one, too gloomy a view should not be taken of an apparently grim increase in major venereal infection.

#### ATTENDANCES.

The total attendances at the three Treatment Centres and in respect of the main classification of patients are shown in the following table:—

	Syphilis.		Gonorrhoea.		Other Ven. Diseases.		Non-Ven. Diseases.	
	M.	F.	M.	F.	M.	F.	M.	F.
DUNDEE ...	517	691	332	485	32	47	40	132
DUNFERMLINE	1234	381	3109	257	557	54	172	85
KIRKCALDY ...	1480	1264	928	240	532	53	136	193

#### Hospital Cases.

		IN-PATIENT DAYS.	
		Male.	Female.
Dundee Treatment Centre	...	165	0
Dunfermline Treatment Centre	...	29	151
Kirkcaldy Treatment Centre	...	285	251
Total	...	479	402

#### TRAVELLING VOUCHERS.

The total expenditure incurred during the year in defraying travelling expenses of patients suffering from Venereal Disease amounted to £7 11s 11d.

#### Diabetes.

##### SUPPLY OF FOOD AND INSULIN.

In terms of the scheme under the Public Health (Amendment) Act, 1925, 33 patients were granted insulin and special articles of diet free of cost or at reduced rates. The cost of insulin during the year was £96 6s, and grants of additional nourishment cost a sum of £51 13s 4½d.

#### Pathological Examinations.

The number of specimens submitted for examination by Medical Practitioners during 1946 was 183, namely Throat Swabs 170, of which 19 were positive for Diphtheria, and 13 Bloods of which 5 were positive for Enteric.



## HOSPITAL SERVICES.

---

### Cameron Hospital.

Cameron Infectious Diseases Hospital, completed in the early years of the recent war, was officially opened for the reception of cases in February, 1941. Due to the state of emergency and the necessity of providing increased accommodation for expected casualties, the Hospital functioned as an Emergency Medical Service General Hospital until November, 1945. After a brief period required for re-organization, repairs, staffing, &c., the reception of cases was resumed.

Miss Jack retired after many years devoted service as Matron, and Miss J. Ross was elected to the post of Matron. The main interest of Miss Jack's life was her patients and she worked unsparingly in their interests. She played an important part in the designing of the new hospital, which in many ways will be a memorial to her. She has deserved well of the community and the best of good wishes go with her in her retirement.

The increasing volume of work in the hospital and the heavy duties of general practice forced Dr C. G. Skinner to terminate regretfully his appointment as Medical Officer, in which capacity he gave valuable and devoted service for many years to the old Cameron Infectious Diseases Hospital. Dr A. H. Lauder was appointed Resident Medical Officer in October, 1946.

The original aim of Cameron Hospital was to provide Infectious Diseases hospital accommodation for the whole County, and to this end the Infectious Diseases Hospitals at St Andrews, Auchtermuchty, St Michaels, and Thornton have been closed for the reception of Infectious Diseases, and the admissions to Overstone Hospital restricted. Cameron Hospital now serves the whole County of Fife with the exception of Dunfermline and Beath Areas.

For this purpose the hospital is well sited and supplies adequate accommodation to cope with normal epidemic incidence. The ward construction of the hospital is among the most modern in Britain.

The general shortage of nurses, which is at present being experienced, has not been felt nearly so acutely as at other less fortunate hospitals. This can be attributed to the untiring effort of Miss Ross in seeking for staff, the fairly central situation of the hospital, and the fact that it is a Training School for Nurses, and thus offers greater attraction to the young girl intending to make nursing her career. The question therefore of being unable to cope with any demands made on the Hospital has fortunately not arisen, and it is to be hoped, never will.

The following tables show the final diagnosis and numbers of cases admitted during 1946. Some of the admissions of non-infectious medical cases under a wrong diagnosis might be explained by the difficulty experienced by the General Practitioners in finding hospital accommodation for seriously ill general medical cases.

Since the admissions covered only a proportion of the infectious diseases in Fife, in the latter half of the year, the numbers are not high and do not of themselves permit general observations in disease incidence and trends.

### Patients Admitted from East Fife.

Number of Non-Service Patients.											Service	Total Admissions
DISEASE.	BURGHES											
FINAL HOSPITAL DIAGNOSIS.	Falkland	St Andrews	Crail	Cupar	Tayport	Newburgh	Newport	Anstruther	Ladybank	Landward		
(1) Diphtheria ... ..							1			2		
(2) Dysentery ... ..										1		
(3) Acute Infected Jaundice ... ..										1		
(4) Measles—Br. Pneum. ... ..								1		1		
(5) Ophthalmia Neonatorum ... ..										1		
(6) Acute Primary Pneum. ... ..		1						1		1		
(7) Puerperal Fever ... ..		2								2		
(8) Puerperal Sepsis ... ..				1						1		
(9) Scarlet Fever ... ..		6	1	3	10	1	1		4	12		
(10) Bronchitis ... ..						1						
(11) Burns (Toxaemia) ... ..										1		
(12) Follicular Dermatitis ... ..				1						1		
(13) Hypothyroidism ... ..										1		
(14) Impetigo ... ..										1		
(15) Lymphadenitis ... ..				1						1		
(16) Pemphigus Neonatorum ... ..										1		
(17) Quinsy ... ..										2		
(18) Scabies ... ..	5									15		
(19) Tonsillitis ... ..		1								2		
(20) Toxic Rash ... ..		1										
TOTALS ...	5	11	1	6	10	2	2	2	4	40		
										—		
										83		

*Average Patient Days in Hospital* ... 19.4 Days.

*Deaths—Nil.*

Patients in Hospital, 31/12/45	...	...	...	Nil
Admitted during 1946	...	...	...	83
Discharged during 1946	...	...	...	61
Patients in Hospital, 31/12/46	...	...	...	22

## Patients Admitted from West Fife.

Number of Non-Service Patients.										Landward	Service	Total Admissions
DISEASE.	BURGH.											
FINAL HOSPITAL DIAGNOSIS.	Buckhaven and Methil	Lochgelly	Burntisland	Leven	Markinch	Leslie	Kinghorn	Cowdenbeath				
(1) Cerebro-spinal Fever ...									2		2	
(2) Chicken-pox ...				2					2		4	
(3) Diphtheria ...	5	1		1	1	7			19	1	35	
(4) Dysentery ...									1		1	
(5) Erysipelas ...									2		2	
(6) Acute Infective Jaundice ?	1										1	
(7) Measles ...	1										1	
(8) Ophthalmia Neonatorum ...			1						1		2	
(9) Acute Influenzal Pneumonia	4	1	2	3					5		15	
(10) Acute Primary Pneumonia	3	3	4	1					15		26	
(11) Puerperal Fever ...	2								3		5	
(12) Puerperal Pyrexia ...	1	1							1		3	
(13) Scarlet Fever ...	22	2	6	10	3		2		46		91	
(14) Pulmonary Tuberculosis ...									2		2	
(15) Tuberculous Meningitis ...								1	1		1	
(16) Whooping Cough ...											1	
(17) Acute Necrosis of Liver ...				1							1	
(18) Bronchiectasis ...	1								1		2	
(19) Bronchitis ...	1		1						2		4	
(20) Drug Eruption ...	1										1	
(21) Exfoliative Dermatitis ...	1										1	
(22) Gangrene ...				1							1	
(23) Gastro-enteritis ...	1										1	
(24) Influenza ...					1				2		3	
(25) Laryngitis ...				1					1		2	
(26) Localised Encephalitis	1										1	
(27) Meningitis ...									1		1	
(28) N. A. D. ...	2										2	
(29) Prematurity ...	1										1	
(30) P. U. O. ...	1										1	
(31) Pyelitis ...									1		1	
(32) Quinsy ...	1			1							2	
(33) Rheumatic Fever ...									1		1	
(34) Scabies ...	2			1					13		15	
(35) Septic Dermatitis ...								1	1		2	
(36) Subarachnoid Haemorrhage				1							1	
(37) Teething Pyrexia ...									1		1	
(38) Tonsillitis ...	10			3					15		28	
TOTALS ...	62	8	14	26	5	7	2	2	139	1	266	

Average Patient Days in Hospital ... .. 20.1 Days  
Deaths—Total Number, 11.

Cause of Death.		Age.	Time in Hospital.
Causes—A (1)	Diphtheria ...	3½ Years	5 Days
B (1)	T. B. Meningitis ...	15 Years	21 Days
C (1)	Br. Pneum. ...	11 Months	2½ Hours
D (1)	Br. Pneum. ...	8 Weeks	2 Days
E (1)	Gastro-enteritis ...	5½ Months	3 Hours
F (1)	Lob. Pneum. Hypothyroidism, Cardiac Failure ...	64 Years	26 Days
G (1)	Bronchiectasis, Lung Abscess, Septicaemia	40 Years	5 Minute
H (1)	Pneumonia, Congestive Cardiac Failure ...	88 Years	11 Days
I. (1)	Acute Hepatic Necrosis	3 Years	2 Days
J (1)	Acute Infective Jaundice	32 Years	3 Days
K (1)	Gangrene of Leg, Septicaemia	61 Years	7 Days

Patients in Hospital, 31/12/45	...	...	...	<i>Nil.</i>
Admitted during 1946 ... ..	...	...	...	266
Discharged during 1946 ... ..	...	...	...	219
Patients in Hospital, 31/12/46	...	...	...	47
Patients admitted during 1946, E. Fife (I. D.)			...	83
" " W. Fife (I. D.)			...	266
Tonsillectomy Operations	...	...	...	558
Orthoptic Operations ... ..	...	...	...	5
Total Patients admitted, 1946		...	...	912

Scarlet Fever.

One hundred and thirty-eight cases were admitted, in 129 of which the diagnosis was confirmed. The remaining 9 cases consisted of—Prodromal Chicken-pox rash (2), Benzyl Benzoate Rash (1), Food Rash (1), Quinsy (1), Septicaemia (1), P. U. O. (1), Tonsillitis (2).

The general run of cases was of a very mild type. Antiserum was administered only in early cases of moderate severity. Apart from auto-inoculation skin sepsis, there were virtually no complications, and no case was discharged suffering from scarlatinal sequelae. In the event of more serious complications, *e.g.*, otitis media, we have now extremely efficacious therapeutic agents in the Sulphonamide drugs, and especially Penicillin.

The routine practice was to retain cases for a period of 4 weeks. Recent observations indicate that this may be unnecessarily long. Apart from the presence of obvious complications, it is not a practical procedure to determine by bacteriological investigation, whether or not a case is still infectious on discharge, and it is estimated that up to 50 per cent. of cases may still be harbouring the causal organism. Despite this, in the present small series, there were no return cases, *i.e.*, new cases infected by the patient within one month after discharge.

The average stay in hospital was 28.4 days.

*Diphtheria.*

Seventy-one cases were admitted, in 37 of which the diagnosis was confirmed clinically and/or bacteriologically. In the others, the final diagnosis was :—Tonsillitis—Follicular, Ulcerative, &c. (28), Peritonsillar Abscess (3), Measles (1), Catarrhal Laryngitis (2).

One death occurred from early toxic myocardial failure. The patient was a child aged  $3\frac{3}{4}$  years, and there was no record of his having been immunized. One other child aged 3 years, also not immunized, developed palatal and extrinsic ocular paralysis. Apart from this, there were no cardiac or neurological complications. A short systemic course of Penicillin was found to be very effective in treating convalescent carriers. Antiserum intramuscularly, and in serious cases, intravenously, is still the accepted treatment of the developed case of Diphtheria. Penicillin may have some

value as an adjuvant in the treatment of a serious case, but in routine treatment has no great value.

Age distribution of cases—

Age.	No. of Cases.	No. Immunized.
0—4 years.	8	2
5—9 „	9	5
10—14 „	10	7
15—24 „	7	0
25— „	3	0

These numbers are not enough to allow observations of statistical significance in the severity of infections in the different age groups, but as noted above, the only death and serious complications occurred in non-immunized children of the 0—4 years' group.

The average stay in hospital was 37·4 days.

### *Pneumonia.*

A total of fifty-nine cases were admitted, diagnosed as Pneumonia—acute, primary, or influenzal. In 44 cases the diagnosis was confirmed. The remainder were diagnosed as Bronchitis (4), Colds (2), Measles (2), Influenza (1), Pulmonary Tuberculosis (2), Bronchiectasis (1), Whooping Cough (1), Burn toxaemia (1), Teething pyrexia (1). Two cases of Pneumonia were secondary to Measles and one secondary to Whooping Cough. It is probable that with the widespread use of Sulphonamides and Penicillin in practice, many potential and early Pneumonias are prevented or aborted, and a large percentage of straightforward cases successfully treated without recourse to hospitalisation. The effect of this is seen in the high percentage of cases in which the prognosis is threatened by extremes of age, concurrent disease, extensive disease, or previous unsuccessful treatment. The majority of the cases have in fact, undergone a process of selection on grounds of gravity of illness and unsatisfactory home conditions. No case of empyema developed. However, 15 per cent. of the cases treated developed sterile pleural effusions which were fairly rapidly absorbed. It is probable that some at least of these represented what would have been empyemas in pre-chemotherapy days. Clinically, 14 cases were Broncho-pneumonia and 30 Lobar pneumonia.

Age Group.	No. of Cases.	Deaths.
0—1 year.	4	2
1—5 years	4	—
5—15 „	8	—
15—40 „	15	—
40—60 „	5	—
60—	8	2
	<hr/> 44	<hr/> 4

Death occurred in 4 cases in which Pneumonia was considered the sole or part cause. This illustrates well the increasing gravity of the prognosis with extremes of age. (See Deaths C, D, F. and



H). In Pneumonia, Penicillin is a very powerful therapeutic agent. It is best used in conjunction with Sulphonamides in serious cases or where the condition has not responded or has developed signs of intolerance to Sulphonamides. The portable X-ray apparatus which was brought into use towards the end of the year has been found very valuable, especially in Pneumonia cases. It is considered a good practice to X-ray all patients at least once, either in the acute stage, if the diagnosis is in doubt, or preferably during convalescence, to be sure that the condition is resolving normally, and that there is no other intra-pulmonary disease.

#### *Cerebro-Spinal Fever.*

Eight cases were admitted as C. S. F., the diagnosis being confirmed in only 2 of these. One patient was suffering from a tuberculous Meningitis which of course terminated fatally. No other death occurred. The remaining cases showed some meningism secondary to infection elsewhere in the body.

#### *Puerperal Sepsis and Pyrexia.*

Ten cases of Puerperal Sepsis or Pyrexia were treated. The low incidence of hospital cases is probably largely due to the prophylactic or early therapeutic use of Sulphonamides and Penicillin which is now a general practice.

All cases recovered with systemic chemotherapy without local interference.

#### *Erysipelas.*

Three cases only were admitted. They responded favourably to treatment. This disease is now so easily and successfully treated in private practice that it is practically only severe cases and these not responding to treatment, which are sent to hospital.

One fatal case, admitted as Erysipelas, was suffering from an extensive moist gangrene of the leg and septicaemia.

#### *Ophthalmia Neonatorum.*

Three cases were treated, all of non-gonococcal origin. They cleared rapidly and completely with a short systemic course of Penicillin.

#### *Infective Jaundice.*

Three cases were admitted as Infective Jaundice. In one which terminated favourably, the diagnosis of Spirochaetal Jaundice was confirmed. Death occurred in the other two cases (Deaths I and J), Bacteriological, and in case J, post mortem examination failed to prove definitely the cause of the liver damage.

#### *Intestinal Infections.*

No verified cases of Enteric Fever or Dysentery were admitted. One infant (Death E) was admitted suffering from gastro-enteritis and died in a few hours. The bacteriology of the condition was not investigated.

### *Cross Infection.*

One child was admitted to the Scarlet Fever ward suffering from Scarlet Fever and incubating Chicken-pox. There was no history of exposure to Chicken-pox, and the typical rash did not develop for some days after admission. All the susceptible contacts developed Chicken-pox, four of them in 1946. Short of having 100 per cent. single cubicle isolation, it is impossible to foresee and prevent incidents of this nature. With this exception, there were no cases of cross infection, either by new diseases or complications of existing conditions.

### *Tonsillectomy and Orthoptic Operation.*

For some time before the reception of Infectious Diseases cases began a fairly large number of children were admitted for operation. This opportunity was taken since the waiting list was long and facilities elsewhere in the County were poor. After the admission of infectious cases these operations were still carried on, but with smaller and less frequent groups of children. It was considered that, with the facilities for cubicle isolation, the risk of these children being cross-infected could be cut to an absolute minimum. In all, 558 operations were carried out successfully by Mr Farquharson. No case of cross-infection arose. In addition, 5 children were admitted for Orthoptic operations carried out by Dr Leeds.

### *Bacteriology, &c.*

As in previous years, the routine and special bacteriological and serological investigation required by the patients was carried out by Professor Tulloch in Dundee. In this capacity Professor Tulloch's assistance has been very valuable, and he has always been willing to give helpful advice in unusual cases.

### **Thornton Infectious Diseases Hospital.**

This year saw the final closure of the Hospital after 44 years' continuous service in the treatment and control of infectious diseases. Those who designed the hospital planned well, for the building, in its last days, not only compared reasonably well with more recently constructed infectious diseases hospitals but also was still plainly serviceable for further use in the accommodation of patients not suffering from acute illness. It was obvious that little difficulty would be encountered in converting the buildings into an excellent type of hospital for the care of low grade mental defectives in accordance with the arrangements made in 1938.

During the first six months of the year the following number of cases were admitted; the last case having been discharged on 12th July:—Scarlet Fever, 106; Diphtheria, 79; Erysipelas, 1; Pneumonia, 95; Ophthalmia neonatorum, 12; Puerperal pyrexia, 11; Dysentery, 3; Meningitis, 9; Septicaemia, 2; Encephalitis lethargica, 1; Purpura, 1. Total cases admitted, 320.

### West Fife Infectious Diseases Hospital.

Dr Barclay Reekie, Medical Officer of Health, Dunfermline, has submitted elsewhere a report on the year's work in this Hospital. His well written report is, as usual, both interesting and informative. During the year, 689 cases were admitted, of which approximately two-thirds came from County Areas.

### East Fife Infectious Diseases Hospitals.

The following table gives particulars of the number of admissions to St Michaels and Ovenstone Hospitals during 1946. On 21/12/46 St Michaels Hospital was closed for use as an Infectious Diseases Hospital. Future cases from the area served by this hospital will be treated at Cameron Hospital.

Disease.	NO. OF CASES ADMITTED.	
	St Michaels.	Ovenstone.
Cerebro-Spinal Fever ... ..	—	1
Chickenpox ... ..	3	—
Diphtheria ... ..	10	5
Dysentery ... ..	2	—
Erysipelas ... ..	—	4
Measles ... ..	3	—
Acute Influenzal Pneumonia ... ..	8	18
Acute Primary Pneumonia ... ..	—	1
Pneumonia (other forms) ... ..	2	3
Scarlet Fever ... ..	70	15
Paratyphoid B—Fever ... ..	—	4
Tuberculous Meningitis ... ..	1	—
Croup ... ..	—	1
Other ... ..	26	—
Total ... ..	125	52
Average Patient Days in Hospital ... ..	21.1	24.4
No. of Deaths ... ..	3	4

### Registration of Nursing Homes.

The following homes are registered in Fife in terms of Section (3) of the Nursing Homes Registration (Scotland) Act, 1938 :—

- (1) *Orcadia, Burntisland*—Angus J. McDonald and Mrs Catherine M. Linklater or McDonald.

This Home is mainly used for old and infirm persons unable to care for themselves and in need of a certain amount of nursing care. In addition to Mrs McDonald, who is a trained nurse, there are three other trained nurses on the staff. The Home is well maintained and conducted in a satisfactory manner.

- (2) *Garth Hill, North Queensferry*—Dr A. J. Brock.

This is a private residence and admits mainly cases of neurasthenia. It is well conducted and maintained.

- (3) *Miramar Nursing Home, Marketgate, Crail*—Miss Ann Mackenzie.

This Home is mainly for elderly patients not requiring much nursing care, and has accommodation for 13 patients.

- (4) *Craigmount Nursing Home, St Andrews*.—Miss Rachel White.

This Home takes medical and maternity cases and has 12 beds.

- (5) *Dunreggan Nursing Home, Elie*—Miss Mollie Robb.

This Home takes medical cases only and has 12 beds.

With the Cottage Hospitals at Cupar, St Andrews, and Buckhaven, these Homes have been a great boon to the community. In spite of staffing difficulties, a high standard of nursing has been maintained.

## NUTRITION.

---

There is no universally accepted standard by which the state of nutrition of an individual or a community can be judged, but by observation it is possible to arrive at a reasonably accurate assessment. The medical records of school children which have been maintained for a number of years afford sufficient information to indicate that the state of nutrition of this section of the community is satisfactory. The circumstance is due to several factors, an important one being the fact that the ordinary diet of school children is supplemented by milk in schools and a substantial mid-day meal on five days per week. Physical recreation in the form of school sports and games has afforded an additional reason for improvement in the muscular development and posture of the children.

Infants and pre-school children have received benefit from the Milk Priority Scheme and through the issue of vitamin preparations. Generally speaking, the nutritional state of this group is also satisfactory.

The same, however, cannot be said of a considerable section of the population, particularly the elderly and adolescents in industrial areas who do not have access to works canteens. These people have perforce to exist on their bare rations, which have a nutritional value approaching the minimum. In appearance they are often well nourished, but that is mainly due to the preponderance of starch in their diet, which tends to fatten more than nourish. The national diet of to-day is definitely lacking in first class protein and other energy producing elements. This deficiency accounts for the tiredness, irritability and dejection which is affecting so many of the population. People rise from their bed even more tired than before going to rest. They return from holiday without any feeling of re-invigoration. As a basis, they require adequate diet, but in these days when the issue and consumption of food is ruled by mathematical formulae, it is difficult for people to find the nutriment they require.

On the other hand, facts have to be faced. As a result of the war our country is not in a position either to produce or to import in adequate amount the quality of foodstuffs best required for our proper nourishment. The rationing system has afforded means for a fair distribution of the foods that are available, and there is little doubt that quite a number of people with small incomes are thereby in better physical condition than they would otherwise have been. There are also people who, for no apparent reason, fail to take advantage of issues arranged for their special benefit, notably expectant mothers who have shown themselves



to be singularly reluctant to collect the vitamin preparations which the Ministry of Food has placed at their disposal.

The source of greatest irritation to most people, however, is the glibness with which highly placed spokesmen from time to time aver that the nutritional state of the average man and woman is to-day higher than it ever was. That the statement is highly misleading will be confirmed by every impartial observer, both medical and non-medical. Housewives, even those with no knowledge whatsoever of food values, are provoked, from their own practical experience, to exasperated indignation by these statements.

It is harmful when people in authority pretend that things are better than they are. Thinking people fully realise the difficulties of the times and are prepared to make allowances. They appreciate frankness: obvious misstatements provoke distrust.

The national diet has now been reduced to a minimum. Further cuts in energy producing foods will be attended by disaster. Good food is an essential adjunct to capacity for work. Accordingly, it is a matter of first importance that every effort be strained to improve the quantity and quality of the national basic food supply.

The opportunity is taken of expressing deep gratitude to the people of Australia, Canada, South Africa, and the West Indies who in course of the year sent consignments of foodstuffs as a gift to old folk, infants and invalids. The food consisted of dried fruit, jam, malted milk, tinned milk, sweets, sugar, tinned vegetables, tinned stew, jelly crystals, and chocolate powder. The total weight amounted to approximately 16 tons 10 cwts. In addition, over 2,000 sticks of shaving soap were received. Just before Christmas, distribution was made under the supervision of the Health Visitors. Numerous letters were received from recipients expressing their delight at the addition to their diet, the austere monotony of which was so greatly relieved. The County Council sent thanks to the various colonial organisations who were responsible for the gifts.

## FOOD POISONING.

---

No cases of food poisoning were reported in the western division of the County in 1946.

In last year's report it was noted that an outbreak of paratyphoid fever in the Anstruther Area, involving 15 cases, was traceable to the consumption of ice-cream. During 1946 three cases of para-typhoid fever occurred in this area, but a similar source of infection could not be established. The repeated outbreaks which have occurred in the locality lent support to the view that intermittent carriers may be at the base of the trouble.

In the north-east of Fife attention was drawn by a practitioner to cases of Gastro-enteritis occurring among children in his practice which might have been due to a food infection. No common factor as regards food or water was however found.

No other cases of infection due to food infection are known to have occurred.

## MENTAL HEALTH SERVICE.

---

In the Report for 1945 a description was given of the organisation of the Health Care Scheme. No alteration took place in 1946. The basic structure of the scheme has been well laid. It provides scope for expansion, and at the same time is sufficiently integrated to ensure close collaboration between the various interests concerned, given the will to co-operate.

The following particulars have been completed from the reports submitted by those principally concerned in the operation of the scheme, and due acknowledgment is made of their help.

### Adult Psychiatry.

In the General Hospitals at Kirkcaldy, St Andrews, and Cupar facilities have been available for Out-Patient Clinics. The only area in which facilities have not been available is Dunfermline but an early agreement as to this area is anticipated. It is obvious that the need for these clinics is greater in the industrial part of the County where the greater proportion of the population is resident.

Most of the work in these clinics has been consultative, the patients being seen by appointment. These consultative facilities are not meeting the real function of an Out-Patient Clinic which should provide treatment as well as advice. The investigation of mental and especially of nervous illness requires much time, and, with the staff available, treatment has been carried out only in the most urgent cases. Additional medical staff are now available and it is intended to devote time to treatment. This will mean attendance by the Psychiatrist at the Kirkcaldy and Dunfermline Clinics on two or three days each week. In order to permit of the Psychiatrist devoting time to treatment the appointment of a Psychiatric Social Worker is essential. As pointed out in a previous report a sufficient number of Psychiatric Social Workers are not available, and the full services of the Clinics will be limited for some time. The services of a Psychologist would also be helpful. The Principal Teacher Psychologist is fully employed with Child Guidance, but the Director of Education has agreed to provide a Teacher Psychologist for any investigation required. It is now recognised that the lay Psychologist can be of great help to the Psychiatrist, and that the Psychiatrist can be of great help to the Psychologist.

Among the patients seen at the Out-Patient Clinics are many who require investigation and in-patient facilities would be of great benefit. In Fife the only Hospital available is the Mental Hospital to which patients can be admitted voluntarily. This is not satisfactory, but is the only procedure possible until a Psychia-

ric Unit is provided in the General Hospitals. Psycho-neurotic illness is a type of illness which responds to treatment, but a special hospital or special unit in a General Hospital is recommended.

The number of patients seen under the Mental Health Scheme is set forth. Several of these patients have attended on more than one occasion.

Kirkcaldy Psychiatric Out-Patient Clinic	...	...	41
St Andrews	...	...	4
Cupar	...	...	8
Mental Hospital	...	...	11
Domiciliary	...	...	25

### After Care Organisation.

(WAR SERVICE CASUALTIES).

Twenty-one new cases have been referred during the year, and the number of cases on the register for the last quarter of 1946 was 41.

Of the latter, 26 are employed, one is on a Government training course, 4 are at present not fit for work, and the remaining 10 are either on leave or requiring placement in a sheltered workshop such as is not at present available, or there is no recent information concerning them. On the whole the employment position as regards ex-service neurosis patients is fairly satisfactory, provided their disability is not such as to make it difficult for them to mix and work with others. The relatively small number, however, who do not have such personality difficulties form a real hard core, and until the Ministry of Labour's proposed sheltered workshops become available the outlook for employment for these men is rather gloomy, and the effects of prolonged illness is a deterrent in such psychological adjustment as is possible for them.

The Government Training Schemes are fairly popular, but for some trades there is a very long and disheartening waiting list.

The psychiatric social worker has continued to serve as a member of the Ministry of Labour Disablement Advisory Committee for East Fife, and nine panels have been attended during the year. In addition to decisions as to whether applicants should or should not be registered in cases which appear doubtful to the Ministry of Labour the panels have now been asked to review and make suggestions where possible for registered disabled persons who have been unemployed for more than 8 weeks.

The following is a summary of work undertaken :—

Patients on Register at 31/12/46	...	...	41
Home Visits and Clinic Interviews	...	...	93
Consultations with Disablement Rehabilitation Officer	...	...	20
Referred to Psychiatric O. P. Clinic	...	...	2
Referred to Panel Doctor	...	...	1
Referred to Speech Therapist	...	...	1

### Child Guidance.

#### I. SOURCES OF REFERRAL.

During the year, 593 cases were referred to the Clinic, an increase on the previous year of 97 children.

For convenience of assessment the cases were graded as A type where a pure emotional disturbance appeared as the major difficulty to be solved only by intensive clinical treatment; B type where the major factor appeared to arise from educational difficulty associated with emotional disturbance and where remedial treatment would be most beneficial. In both types an intermingling of causes was evident and some B type were found to be largely of A classification, and *vice versa*.

The wide variety of sources of referral is indicated by the following list :—

	A Cases.	B. Cases	Total.
1. Head Teachers ... ..	17	421	438
2. Director of Education Dept. ...	6	84	90
3. M. O. H. Department .....	22	5	27
4. Psychiatrist ... ..	4	2	6
5. Court Cases ... ..	16	0	16
6. Parents ... ..	10	2	12
7. Other sources ... ..	2	2	4
	<hr/> 77	<hr/> 516	<hr/> 593

## II. SUMMARY OF WORK DONE.

Of the 593 children referred, 36 are awaiting initial interview while 557 cases were examined. In connection with these 557 cases there were two special investigations—(a) examination and diagnosis of children referred for backwardness by head teachers, and (b) examination and ascertainment for educational fitness of a number of physically defective children.

Of the total number of cases examined, analysis is given on percentage basis of the range of intelligence quotients obtained for 536 children, the remaining 21 cases being children for whom no I.Q. could be found as they were in the lowest possible grade for intelligence or in respect of whom purely diagnostic results were obtained.

### Range of I.Q.'s Tested and Percentage.

I.Q. Grading	No.	Percentage.
Above Average	120+	8
	110—119	11
Average	100—109	29
	90—99	55
Below Average	80—89	97
	70—79	116
Below	70	220
	<hr/> Total	<hr/> 536

The weighting at the lower end of the scale is understandable in view of the number of educational type of cases concerned and of the special investigations to which previous reference was made. The allocation at each range is satisfactory and presents a normal sampling of child guidance types of referral.



A more detailed analysis in numbers only of the causes for which children were referred is submitted :—

1. *Education*—

General Backwardness (469—27 were found to belong primarily to the categories cited below	...	...	...	...	442	
Disability in Arithmetic	...	...	...	...	5	
Disability in Reading	...	...	...	...	12	
Disability in Spelling	...	...	...	...	4	
Disability in English	...	...	...	...	—	
						463

2. *Emotional Disorders*—

General Instability	...	...	...	...	6	
Anxiety and Obsessional states	...	...	...	...	5	
Night terrors, nightmares, sleep-walking	...	...	...	...	7	
Enuresis and soiling	...	...	...	...	7	
Emotional retardation and regression	...	...	...	...	8	
Psychopathic personalities	...	...	...	...	1	
						34

3. *Behaviour Disturbances*—

Unmanageable behaviour	...	...	...	...	11	
Aggression and temper tantrums	...	...	...	...	4	
Sadistic tendencies	...	...	...	...	1	
Exhibitionism	...	...	...	...	5	
Truancy and wandering	...	...	...	...	13	
						34

4. *Delinquency*—

Theft	...	...	...	...	...	13	
Lying	...	...	...	...	...	3	
Malicious Mischief	...	...	...	...	...	7	
Sex	...	...	...	...	...	3	
							26

No. of Children examined ... = 557

The very heavy case load referred during the year was dealt with by two teacher-psychologists appointed to the staff. In addition a third has given her services since June on her return from training. A summary of the work covered is as follows :—

<i>Child Examinations</i>	...	...	...	407	
In Schools	...	...	...	324	
In Homes	...	...	...	41	
Kirkcaldy Clinic	...	...	...	30	
Dunfermline	...	...	...	12	
				407	
<i>Treatment Sessions</i>	...	...	...	2021	
Kirkcaldy Clinic	...	...	...	1071	
Dunfermline Clinic	...	...	...	950	
				2021	
<i>Cases Discharged</i>	...	...	...	25	
As adjusted	...	...	...	23	
No co-operation...	...	...	...	2	
				25	

<i>Improved</i> ... ..	229
<i>Continuing Treatment</i> ... ..	48 approx.
<i>Extra School Visits</i> ... ..	80
<i>Parent Interviews</i> ... ..	147
<i>Home Visits</i> ... ..	77
<i>Special Vocational Guidance Testing</i> ...	1

A fourth teacher-psychologist, who had finished training, in the course of approximately two months covered—

<i>Child Examinations</i> ... ..	64
<i>Treatment Sessions</i> ... ..	33

The examination of children entails interviews of two types—diagnostic and treatment. In the former interview, all relevant circumstances from before birth onwards are considered, including an assessment of parent or guardian. In addition an individual verbal test of intelligence is given which lasts about an hour. In some cases also a scale of performance tests which indicate the child's "practical" ability as distinct from his verbal ability is applied. Almost every case in addition is given an educational survey, so that the possibility of educational retardation as a contributing cause may be recognised or eliminated. The first part of the survey usually takes about one hour but varies according to age. The second part must be very thorough to be a sound guide in treatment. Altogether the minimum time for initial examination of a child varies from 2-2½ hours.

In addition a diagnostic and advice service continues in the schools throughout the County whereby children are classified and adjusted in so far as their problem in school has been diagnosed and overcome by the transfer of children to classes where the teacher works in co-operation with the Psychologist, and carries out suggestions and instructions for remedying the difficulties of school work and behaviour in special "Adjustment Classes."

In addition to organising the work of the clinic and psychological staff the Psychologist has conducted examinations and treatment sessions for the more severe problems. Appended is an analysis of the work covered.

<i>Child Examinations</i> ... ..	86
In Schools ... ..	28
Kirkcaldy Clinic ... ..	46
Dunfermline Clinic ... ..	9
Remand Home ... ..	2
Home ... ..	1
	<hr/>
	86
<i>Treatment Sessions</i> ... ..	782
<i>Cases Discharged</i> ... ..	31
<i>Adjusted</i> ... ..	31
<i>Continuing Treatment, approx.</i> ... ..	22
<i>Extra School Visits</i> ... ..	70
<i>Parent Interviews</i> ... ..	17
<i>Home Visits</i> ... ..	9

A course of lectures on mental testing was delivered to teachers and head teachers, and a second series of lectures on psychology were given to members of the public. During the year nine different individual talks were given to various bodies—parent-teacher associations and other organisations on the work of Child Guidance in order to enlist their co-operation. The result of one of these talks has been the adoption of the Clinic by the Fife Infant Teachers' Association who voluntarily agreed to donate £1 annually to help with the toy fund for replacing broken toys for the children.

### III. PSYCHIATRIC SOCIAL WORKER.

The work of the Psychiatric Social Worker has been mainly confined to home visits and interviews in the clinic in connection with guidance work with parents. Since the present clinic premises became available, the number of home visits has lessened, these being undertaken only where absolutely necessary. Interviews in the clinic however have increased by 62 per cent. Regular visits to the clinic involve effort, and sometimes real inconvenience on the part of the parent, and when treatment of the child spreads out over months this continued attendance is one of the indications that real co-operation has been obtained, and that the parent recognises the need for a change in her own attitude and is prepared to work for it.

The actual number of cases registered, 100, is a decrease on last year's figure of 129. Of the registered cases, 29 were carried forward from 1945, 62 were new cases, 2 were referred by the School Medical Officer for preliminary social investigation, and 7 were adult cases referred from or referred on to the County Psychiatrist.

An overall assessment of results achieved by the Clinic can be given only by evaluating the progress made by the child, and it is not easy to distinguish how far adjustment of the individual child or adjustment of his or her environment is responsible for improvement. The general impression gained, however, has been of very real co-operation and solid results achieved on the part of the parents. Quite a number of parents whose children have been referred after having become involved in serious difficulties, either of a psychological nature or through the courts, have expressed a wish that they had known of the help offered by the clinic at a much earlier stage. It appears that a source of real preventive work for the future would be opened up if, when the time is ripe for more full-time psychiatric investigation and treatment, information about the clinic service were sent out to reach general practitioners and the general public through channels other than the schools, as it appears that the use of the clinic by the latter is already very well established. There may be room for propaganda in the school service about the type of cases referred, as experience shows that the obviously difficult, backward or troublesome child, who may, by such behaviour be reacting in a comparatively healthy

way to his problems gets referred immediately, while the shy and inhibited child, more likely to show maladjustment in later life in the form of nervous breakdowns or psychotic reactions, goes unnoticed because he does not direct attention to his difficulties by his nuisance value—but this is a development which can only grow with time and the spread of knowledge as to what symptoms are significant.

During the year an enquiry was raised from Edinburgh University Department of Social Studies as to the possibility of providing practical experience for a social science student in the clinic, but it was felt that until the social side was able to provide more all round training facilities, this would not be practicable. It is however a development very much to be hoped for in the future as not only do the students help to cover a fair amount of work dealing with the less complicated cases, but they provide a healthy contact with the University Training Centres, and may prove a potential source of clinic staff in the future.

Two talks related to Clinic work were given by the Psychiatrist and Social Worker.

The following is a summary of work undertaken :—

*Visits—99.*

History ...	21
Treatment ...	56
Follow-up ...	12
Miscellaneous ...	10

*Clinic Interviews—*

History ...	48
Treatment ...	252
Miscellaneous ...	16

*Other Agencies dealt with—*

Hospital, Doctor or Clinic	8
Minister ...	1
Probation Officer	10
Voluntary Societies	3
Statutory Authorities	3
Recreation arranged	2
General Help—Clothing Coupons, Financial Assistance, &c.	6
Work found	1
Housing ...	4

#### IV. CHILD PSYCHIATRY.

The work of the Psychiatrist as a member of the Child Guidance Clinic team has been limited in scope due to attention to other aspects of mental health. There has been difficulty in obtaining a qualified and trained medical staff in the Mental Hospital, and little time could be spared for Child Guidance work. A second reason is because most cases referred to the Child Guidance Clinic have presented symptoms which have been diagnosed as educational problems and have been dealt with by the Psychologist. This is natural when it is realised that the source of referrals is



chiefly an educational one. In a previous report it was pointed out that in any scheme some time must elapse before there is an understanding as to the type of child who can benefit from Child Guidance, and as the problems appeared to be chiefly educational these were dealt with first. In the organisation of a Child Guidance Clinic there is still divergence of opinion as to the functions of the Psychiatrist, and because of this some Authorities have set up "Educational Clinics" and "Psychiatric Clinics." This is most unfortunate, is unsatisfactory and can only result in unnecessary difficulties. If the educational aspect appears prominent in Fife it is only because the Clinic is dealing with all types. It is better that we should think in terms of a Child Guidance Service, the educational aspect and the psychiatric aspect being parts of the same field, the one merging with the other. A fully trained and experienced Child Psychiatrist has been appointed to the staff of the Mental Hospital, and it will now be possible to investigate more fully medical and psychiatric problems. It is imperative, in the best interests of the children who exhibit the more severe emotional and behaviour disorders, that the clinical team, namely, Psychiatrist, Psychologist, School Medical Officer and Psychiatric Social Worker should each contribute to the investigation. Agreement has been reached as to how this can be attained. The mind and body are indivisible, and even in the less severe emotional disorders there may be physical disorder requiring attention *pari passu* with the nervous disturbances. The subject of Child Guidance is so extensive and there are so many factors requiring investigation—psychological, environmental, educational, physical, dietary—that every member of the team has an equally important role.

During the year some of the accommodation at Broomlee has been taken over for the Probation Officer. As teacher psychologists are now using Broomlee for the testing and treatment of children, the position will require to be reviewed shortly, and the whole of Broomlee made available for the Child Guidance Service if other teachers are added to the staff.

In Fife the foundations of a full Child Guidance Service have been laid, and it is hoped that in due course full advantage will be taken of the service provided. By social adjustment in childhood it is expected that there will be a more adequate adjustment to the diversities of adult life and a resulting decrease in mental and nervous disorder.

### Homeless Children.

The Scottish Home Department Report of 1944 on Homeless children is in all its recommendations in accordance with the scheme which has been in operation in Fife since 1944. It stresses many points with which the Committee are in entire accord and



never more so than in the emphasis placed upon the importance of the value of family life. It is necessary that a Local Authority should have available well run Children's Homes, carefully selected foster parents and all the other facilities for the kindly reception of homeless children, but it is still more necessary that these facilities should not be utilised until it has been established beyond all doubt that there is no option but to separate a child from his parents. The organisation set up by a Local Authority for the care of children deprived of their parents should be activated by a humane and sympathetic understanding, but it should not be so ready of access as to encourage the belief that it exists to relieve neglectful parents of their responsibilities. In this respect credit is due to the Children's Homes Sub-Committee for the care with which they scrutinise every appeal to remove a child from its parents when it rests with them to make a decision.

The following is a summary of the year's work :—

**Children and Young Persons under Supervision of Committee during Year.**

	Education.	Social Welfare.
Position at 1st January, 1946 ...	118	83
New Cases during year... ..	24	17
	<hr/>	<hr/>
Names removed from Register ...	142 24	100 13
	<hr/>	<hr/>
Position at 31st December, 1946 ...	118	87
	<hr/> <hr/>	<hr/> <hr/>

**New Cases during Year.**

	Children and Young Persons committed to care of Education Authority.
Petitions by Education Authority ...	22
Petitions by R. S. P. C. C. (5 families) ...	13
	<hr/>
	35
	<hr/> <hr/>

**Names Removed from Register.**

	Education.	Social Welfare.
Attained 18 ... ..	2	—
Committed to Approved Schools ...	10	1
Order revoked (returned to parents) ...	4	3
To Certified Institutions ... ..	—	1
Legal Adoption ... ..	1	—
Self-supporting ... ..	7	5
Other reasons ... ..	—	3
	<hr/>	<hr/>
	24	13
	<hr/> <hr/>	<hr/> <hr/>

## Positions at beginning and end of Year.

	1st Jan., 1946. Educn. S.W.		31st Dec., 1946. Educn. S.W.	
Boarded-out with Guardians for pay- ment—(a) Within County ...	78	33	64	36
(b) Outwith County ...	1	15	—	16
Under Supervision ...	13	—	12	—
In Orphanages and Institutions ...	4	20	9	20
In Children's Homes—(a) Leven ...	—	—	19	7
(b) St Andrews	22	9	14	2
In Dunfermline Combination Home	—	6	—	6
	<u>118</u>	<u>83</u>	<u>118</u>	<u>87</u>

**Petitions presented under Children and Young Persons (Scotland) Act, 1937.**

On the instructions of the Committee, 22 petitions were presented by the County Social Welfare Officer to the Juvenile Courts in respect of children who were neglected by or beyond the control of their parents or guardians. The petitions were disposed of as follows:—

Children committed to the care of the Education Authority ...	7
Children committed to Approved Schools ...	9
Children placed under Probation Officers' Supervision ...	3
Continued to future Juvenile Court ...	—
Cases not proved ...	3
	<u>22</u>

Petitions in respect of 13 children presented by the R. S. P. C. C. were dealt with as follows:—

Children committed to the care of the Education Authority ...	12
Children committed to Approved Schools ...	1
	<u>13</u>

In addition, the Committee have had under consideration eight other cases of alleged neglect by parents affecting 14 children. Of these, five families are being kept under observation and warning given to the parents, and in the remaining three cases, involving six children, no action was taken.

**Boarded-out Children.**

	Education.	Social Welfare.
Boarded-out for first time ...	10	8
Children removed from one guardian to another ...	10	3
Children removed to Hospitals and Orphanages ...	6	3
Children returned by guardian to Children's Home (unsuitable for boarding-out) ...	6	—
	<u>32</u>	<u>14</u>

All boarded-out children have been visited quarterly, while special visits have been made to guardians on a number of occasions.

Eleven applications were received from parents to have their children returned to their custody and of these ten were refused. One family was returned to the parents, and these children are being kept under the supervision of the Probation Officer.

Towards the end of the year the Children's Home at St Andrews was made available solely for the accommodation of children under the scheme, priority of placing being given to children who had occasioned difficulty for whatsoever reason. It has been a matter for comment that the Matron has so gained the confidence of these children that there has been practically no evidence of misbehaviour on the part of any of them.

From time to time there has been staffing difficulties at Leven Children's Home but the children have been well cared for.

### Remand Home.

During the year 61 boys and 14 girls were admitted to the Remand Home at Dysart. The total duration of stay of these children was 744 days. The number of boys and girls who were retained for one or more days is given in the following table :—

Number of Days.						Boys.	Girls.
1	...	...	...	...	...	13	16
2—7	...	...	...	...	...	13	13
8—14	...	...	...	...	...	17	—
15—21	...	...	...	...	...	12	1
22—54	...	...	...	...	...	2	4

As regards the six cases in the period 22-54 days, one boy was retained for 28 days and the other for 43 days. The latter case was a mental defective for whom accommodation could not at first be found. The duration of stay of the four girls was—29 days, 34 days (a court problem case), 37 days (required hospital treatment), and 54 days (a care and protection case).

According to the Home records the head condition of the girls was remarkably good. Only one was found to have a few nits and one treatment cleared up the case. The case referred to above as requiring hospital treatment was one that attended the Public Health Clinic twice weekly. There were 3 boys who were found to have scabies and who were removed to Cameron Hospital for treatment; one of these was in for 5 days and the other two for 17 days' treatment. Another boy had to be removed to Cameron Hospital suffering from Chickenpox; his stay in Hospital was 2 days. One girl was removed to Springfield Asylum.

The Medical Officer for the Home examined all the children on admission, and again before they were discharged if their stay in the Home was for more than 48 hours. For this purpose he paid 132 visits to the Remand Home. No record is available before

the month of August giving information about other visits which may have been necessitated for other purposes than examination and certification. The Superintendent, however, is now keeping a note of all visits, and the total number of visits of all types paid by the Medical Officer will in future be available for any reports.

Attention has been drawn to the fact that the number of blankets per bed is three. While this number may be sufficient for ordinary weather it may not be adequate during a cold spell in the absence of eiderdown or similar coverings. This was seen in the case of one boy, age 7—a case of chronic bronchitis—who, during his stay of 15 days was given the use of six blankets and also required a hot water bottle. As long as there are only one or two cases in the Home this can be done readily enough, but if a larger number of cases should happen to be admitted during very cold weather it might be found that the amount of bed clothes was inadequate, and it is suggested that there should be a reserve from which the staff could draw.

Mention should also be made of bed-wetting. Before August, when the present superintendent was appointed, there were 2 or 3 cases where bed-wetting had been noted. After August there were 2 outstanding cases—a girl who was in the Home for 34 days and had nocturnal enuresis on each of these days and a boy who was a mental defective, and who also suffered from enuresis every day with the exception of 4 days. This, of course, meant very much more work for the staff.

In connection with the children admitted to the Remand Home the problem of the "Problem Family" looms large. It has long been known that there is an underlying stratum of the population who are habitually dull, slovenly and neglectful, but the war brought them into prominence. No accurate information exists as to the number and grading of such families in Fife, but there are quite a number of cases which compel attention. In some of them income is low and thriftless expenditure uncontrolled. In others housing conditions are deplorable, not so much because of the structural state of buildings as because of a total absence of ordinary house-keeping. In most, meals are scrappy and irregular, and children are allowed to keep very late hours. The cost of these families to the community is excessive, and the problem they present is one demanding the earnest attention of all concerned in educating the backward to adapt themselves to modern civilisation.

## MILK SUPPLY.

---

The following table shows the number of registered milk producers in the County and also producers of designated milks under the Milk (Special Designations) Orders (Scotland), 1936-44 :—

	Year.	Total No. of Registered Producers.	No. of Producers.		
			Certified Milk.	T. T. Milk.	Standard Milk.
EASTERN	1945	115	6	29	14
DIVISION	1946	122	6	38	16
WESTERN	1945	192	2	45	64
DIVISION	1946	193	2	55	49

It will be noted that there has been a considerable upgrading in the designated class. While the number of producers of certified milk remains the same there were 19 more producing T. T. milk in 1946 than in 1945. There were, however, 13 fewer producers of standard milk. One standard licence in the western division was revoked because of unsatisfactory methods, and four other holders of standard licences in the western division gave up dairying altogether, chiefly because of labour difficulties.

The labour problem at dairies is now very difficult. Shortage of suitably trained dairy workers is undoubtedly retarding advance as many dairymen have indicated their willingness to undertake the production of designated milk but find the labour problem insuperable. Those who are entirely dependent on hired labour for the working of a dairy are at the mercy of their workers all the time. Many of the workers are good, know their job thoroughly and take a pride in maintaining low bacterial counts: others are dirty and careless, readily offended if checked regarding their unsatisfactory, unhygienic methods. With workmen of this type it is almost impossible for a dairyman to obtain a licence for the production of designated milk. If he does succeed, it is highly improbable that he will retain it for long. Dairying is work of a highly skilled nature, and it is very desirable that all dairy workers should be of suitable type and thoroughly trained in the various aspects of their trade. Until some system of training is established for dairy workers, conditions will never be entirely satisfactory. Much time and labour is spent by public health officials in visiting unsatisfactory dairies in an endeavour to help dairymen, but when the labour employed is such that intelligence is low or entirely lacking, or the workers are of a type who refuse to be instructed in proper methods and ordinary cleanliness, the task becomes pretty hopeless. There are still too many of the latter type employed in dairy work.

For those desiring to improve their dairy premises or replace old defective premises by modern new byres and other dairy structures, 1946 has been a difficult year. Costs have soared to



unprecedented heights, labour and materials have been difficult to come by, and there has often been great delay in securing the replacement of worn-out equipment like sterilisers, coolers, and milk tubes.

Fife, though largely a dairying County, is still unable to produce all the milk needed for local consumption, and other sources of supply have to be drawn from through the Scottish Milk Marketing Board. The estimated yield of milk from registered dairy premises within the County in 1946, based on two gallons of milk per cow per day, is shown in the following table :—

**Estimated Milk Yield for 1946—Fife County.**

Premises Registered	EASTERN DIVISION			WESTERN DIVISION		
	No. of Dairies	No. of Cows	Estimated Gallons of Milk	No. of Dairies	No. of Cows	Estimated Gallons of Milk
(1) Non-Designated (Ordinary) ... ..	62	950	693,500	87	1,981	1,446,130
(2) Certified ... ..	6	280	204,400	2	74	54,020
(3) Tuberculin Tested ... ..	38	1,415	1,032,950	55	2,034	1,484,820
(4) Standard ... ..	16	552	402,960	49	1,610	1,175,300
<b>TOTALS</b> ... ..	<b>122</b>	<b>3,197</b>	<b>2,333,810</b>	<b>193</b>	<b>5,699</b>	<b>4,160,270</b>

From all of the registered premises in the County there was an estimated yield of 6,494,080 gallons of milk, and of this amount 4,354,450 gallons or 67 per cent. were from designated sources. For the two higher grades of milk alone (certified and T. T.) the estimated yield was 2,776,190 gallons, thus ensuring a large volume of safe milk for the younger members of the community.

During the year, 360 samples of designated milk from dairies in East Fife and 619 samples of designated milk from West Fife dairies were submitted to the County Bacteriologist for examination and report. Of these, 88 in East Fife and 147 in West Fife failed to comply with the terms of the Milk (Special Designations) Orders (Scotland), 1936-44. The number of producers in each area concerned was 44 in East Fife and 65 in West Fife. Advisory visits were paid to these dairies, and instruction in methods of production, &c., given by Milk Officers. Sanitary Inspectors and Medical Officers also kept in close touch with all dairies where samples were unsatisfactory. As already indicated, one standard licence was revoked in West Fife because of continued unsatisfactory methods and poor results. Another standard licence was refused for the same reasons in West Fife at the renewal period, 1st January, 1947.

## MEAT INSPECTION.

The following table shows the number of animals slaughtered and the weight in lbs. of meat condemned during the year 1946 :—

Area	Slaughter-house	NO. OF ANIMALS SLAUGHTERED				Lbs. of meat condemned or destroyed	Lbs. condemned per head of Cattle Slaughtered
		Cattle	Sheep	Pigs	Total		
Anstruther	Anstruther Public ...	1,238	4,324	33	5,595	23,998	19·4
Cupar	Cupar Public Springfield Private ...	2,121	7,788	43	9,952	72,426	34·1
St Andrews	St Andrews Public ...	55	242	18	315	1,378	25·0
		994	5,489	6	6,489	21,111	21·1
<b>TOTAL</b>	<b>East Fife ...</b>	<b>4,408</b>	<b>17,843</b>	<b>100</b>	<b>22,351</b>	<b>118,913</b>	<b>26·9</b>
Beath	Cowdenbeath Public ...	2,525	14,818	31	17,374	38,750	15·4
	Lochgelly Public ...	1,518	7,830	8	9,356	19,716	12·9
Wemyss	Buckhaven Public ...	2,001	10,409	50	12,460	48,206	24·1
	Leven Public ...	957	4,784	47	5,788	28,853	30·1
Kirkcaldy	Markinch Public ...	917	4,943	12	5,872	19,725	21·5
<b>TOTAL</b>	<b>West Fife ...</b>	<b>7,918</b>	<b>42,784</b>	<b>148</b>	<b>50,850</b>	<b>155,250</b>	<b>19·6</b>
<b>TOTAL</b>	<b>Fife County</b>	<b>12,326</b>	<b>60,627</b>	<b>248</b>	<b>73,201</b>	<b>274,163</b>	<b>22·2</b>

For comparison, the statement below gives similar information for East and West Fife in the year 1945 :—

		NO. OF ANIMALS SLAUGHTERED				Lbs. of meat condemned or destroyed	Lbs. condemned per head of Cattle slaughtered
		Cattle	Sheep	Pigs	Total		
East Fife	...	4,093	17,381	100	21,574	117,558	29·1
West Fife	...	7,623	40,293	170	48,086	160,894	21·1
<b>TOTAL</b>	<b>...</b>	<b>11,716</b>	<b>57,674</b>	<b>270</b>	<b>69,660</b>	<b>278,452</b>	<b>23·7</b>

In 1946, the total number of animals slaughtered was 3,541 more than in 1945, this being due to the increase in both the number of cattle and of sheep. The number of pigs slaughtered declined by 22. It is interesting to note the enormous reduction in the number of pigs slaughtered since the beginning of the war. The number slaughtered in 1946 was only 2·5 per cent. of the number (6,739) slaughtered in 1939. The only change in the arrangements for meat inspection during 1946 was at Cowdenbeath Slaughter house. On 15/10/46, this work was taken over by the Sanitary Inspector for Lochgelly Area from the Sanitary Inspector for Cowdenbeath.

### Other Foods.

In view of the persisting shortages in the food supply of the country, it has been thought advisable to include as an additional feature of this year's report, figures showing the amount of food-stuffs other than meat which failed to reach the public owing to its condition being such that it had to be condemned by the Sanitary Inspectors. Although the amount is not large compared with the quantity sold to the public in a satisfactory condition, there is room for improvement in the packing, transport, and handling of food-stuffs. From the tables below it will be seen that the greatest loss was in tinned meat products and un-tinned fruits.

## Seizures under Section 14 of the Public Health (Scotland) Act, 1897.

## (a) Tinned Foods—Period 16/12/45 to 16/12/46.

AREA	MEAT			MILK			FISH			FRUIT			VEGETABLES			PRESERVES			SOUP			MISCELLANEOUS		
	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	No. of Tins	Weight Lbs. Ozs.	No. of Tins	Weight Lbs. Ozs.	No. of Tins	Weight Lbs. Ozs.
Anstruther ...	188	936 4	89	78 15	29	22 12	25	45 15	58	60 6	3	6 8	4	5 0	2	12 0								
Cupar ...	348	1479 8	157	148 3	126	81 4	—	—	135	134 8	6	10 0	4	4 0	10	71 9								
St Andrews ...	301	1321 7	188	170 7	73	47 15	6	15 7	86	80 5	26	44 4	39	38 10	—	—								
Beath ...	252	1138 8	37	38 0	32	117 0	10	88 0	59	257 8	8	9 0	—	—	2	14 0								
Dunfermline	34	190 14	6	5 1	12	11 11	—	—	17	7 1	1	2 0	2	1 14	—	—								
Lochgelly ...	391	1615 9	117	107 15	53	36 10	10	18 12	263	287 14	9	12 0	29	28 5	4	22 0								
Wemyss ...	506	2370 5	51	47 15	77	52 12	83	135 10	119	127 7	32	63 0	56	41 4	6	3 9								
Kirkcaldy ...	303	1247 12	304	219 4	57	43 4	—	—	78	113 3	11	23 8	14	14 0	1	1 0								
TOTAL ...	2323	10300 3	949	815 12	459	413 4	134	303 12	815	1069 4	96	170 0	148	133 1	25	124 2								

The following are the approximate amounts of other food-stuffs condemned during the Year 16/12/45 to 16/12/46 :—

Anstruther Area	...	...	...	534 lbs.
Cupar Area	...	...	...	1,382 "
St Andrews Area	...	...	...	1,137 "
Beath and Lochgelly Area	...	...	...	603 "
Wemyss Area	...	...	...	10,306 "
Kirkcaldy Area	...	...	...	779 "
Dunfermline Area	...	...	...	131 "
Total	...	...	...	14,872 "

(The exceptionally large amount condemned in Wemyss Area included 7,218 lbs. of plums and 1,393 lbs. of pears, which were unfit for consumption due to delay in railway transport).

# SALE OF FOOD AND DRUGS ACTS.

	Official Samples		Test Samples		Total
	Total	Adulterated	Total	Adulterated	
Cupar Area ... ..	23	5	213	13	236
Burghs in Cupar Area ...	39	1	—	—	39
Anstruther Area ... ..	2	—	199	2	201
Burghs in Anstruther Area ...	10	—	—	—	10
St Andrews Area ... ..	3	1	79	2	82
Burghs in St Andrews Area ...	31	3	105	2	136
Kirkcaldy Area ... ..	—	—	233	5	233
Burghs in Kirkcaldy Area ...	1	—	—	—	1
Wemyss Area ... ..	—	—	104	3	104
Burghs in Wemyss Area ...	—	—	—	—	—
Lochgelly Area ... ..	16	1	129	1	145
Burghs in Lochgelly Area ...	5	—	2	—	7
Dunfermline Area ... ..	16	1	335	7	351
Burghs in Dunfermline Area ...	5	1	—	—	5
Beath Area ... ..	1	1	14	1	15
Burghs in Beath Area ... ..	4	1	—	—	4
Total ... ..	156	15	1413	36	1569

*Adulterated Official Samples.*—15 (Sweet Milk, 10 ; Whisky, 4 ; Rum, 1). 12 vendors were fined sums ranging from £2 to £10, involving a total of £65 ; two were warned and one was admonished.



## HOUSING.

---

The housing position was not improved to any great extent. Scarcity of labour and material remained acute.

A Housing Survey was carried out and completed towards the end of the year. The Survey was made to ascertain the exact position with regard to overcrowded and unfit dwellings. It was found that the need for new houses to replace these was greater than was revealed by the Survey of 1939. Owing to lack of maintenance during the intervening war years many houses have reached a stage of unfitness which makes their replacement imperative since they cannot now be renovated and brought up to modern standards of habitability at reasonable cost.

The water supply position has a close relationship to the uninhabitability of houses in the East of Fife. There, many houses have no internal water supply or sanitary conveniences because of the absence of a public gravitation supply of water. Accordingly, it is impossible sometimes to secure the introduction of internal sanitary fitments either because of the cost entailed or because of failure to find an adequate source of supply of pure water. The same factor is handicapping the Housing Committee in erecting new houses to take the place of those which should now be closed or demolished. It is a sad fact that, in many places, houses are still occupied although Demolition Orders were made regarding them many years ago. These houses are in a deplorable condition but action to improve conditions under which people are living is impossible until alternative accommodation is provided.

The following table shows the results of the Survey in summary form :—

Area.	Unfit Houses.	Overcrowded Houses.	Total.
Wemyss ... ..	621	513	1134
Kirkcaldy ... ..	115	437	552
Lochgelly and Beath ...	1599	1749	3348
Dunfermline ... ..	846	1285	2131
Cupar ... ..	698	102	800
Anstruther ... ..	189	30	219
St Andrews ... ..	153	142	295
Total ... ..	4221	4258	8479

Allowing for a theoretical process of decanting and assessing overcrowding on the standards of the Housing (Scotland) Act 1935, but assessing re-housing on the basis of two persons per bedroom, the following number of houses is required to accommodate families who should be displaced from unfit and overcrowded houses :—

Area.	SIZE OF HOUSE.				Total.
	3 Apt.	4 Apt.	5 Apt.	6 Apt.	
Wemyss ... ..	256	296	83	29	664
Kirkcaldy ... ..	110	162	40	21	333
Beath and Lochgelly ... ..	822	1152	362	136	2472
Dunfermline ... ..	338	579	326	84	1327
Cupar ... ..	290	306	30	12	638
Anstruther ... ..	58	59	14	1	132
St Andrews ... ..	96	83	6	3	188
	1970	2637	861	286	5754

The above figures take into account the following temporary houses which were completed and occupied at the time of the Survey :—110 at East Wemyss, 90 at Methilhill, 124 at Crosshill, 35 at Kinglassie, 35 at Auchterderran, 50 at Kelty, and 98 at Lumphinnans. They also take into account the following houses erected or about to be erected in Dunfermline Area—14 at Aberdour, 28 at North Queensferry, 22 at High Valleyfield, 20 at Crossford, and 34 temporary houses at Crossgates. They do not take into account any other housing proposals in the County.

The following tables indicate the position regarding the provision of new houses during the year :—

#### Temporary Houses.

Site.	Type.	Number Completed.	No. in course of Erection.	Total.
Lumphinnans	Arcon ... ..	98	—	98
Crosshill	Arcon ... ..	124	—	124
Lochore	Uniseco ... ..	26	—	26
Thornton	Uniseco ... ..	50	15	65
Methilhill	Uniseco ... ..	90	—	90
East Wemyss	Uniseco ... ..	110	—	110
Crossgates	Aluminium ... ..	6	28	34
Kelty	Aluminium ... ..	50	—	50
Kinglassie	Uniseco ... ..	35	—	35
Cardenden	Uniseco 169 } Alumin. 31 }	35	165	200
Comrie	Aluminium ... ..	—	85	85
	Totals ... ..	624	293	917

## Permanent Houses.

Site.	Type.	No. Approved.		No. in course of Erection.		No. Completed.	
		4 Apt.	5 Apt.	4 Apt.	5 Apt.	4 Apt.	5 Apt.
Aberdour	...Swedish Timber	14	—	14	—	—	—
Aberdour	...Brick ...	18	2	18	2	—	—
Cardenden	...Stuart ...	134	—	134	—	—	—
Comrie	...Stuart ...	246	—	246	—	—	—
Kelty	...Swedish Timber	20	—	20	—	—	—
Kelty	...Brick ...	4	2	4	2	—	—
Kelty	...Stuart ...	226	—	226	—	—	—
Lochore	...Swedish Timber	32	—	32	—	—	—
Lochore	...Brick ...	60	14	60	14	—	—
Ballingry	...Cruden	300	—	300	—	—	—
Kinglassie	...Swedish Timber	20	—	16	—	4	4
Kinglassie	...Brick ...	28	8	28	8	—	—
Kennoway	...Brick ...	88	14	88	14	—	—
Kennoway	...B. I. S. F.	302	—	302	—	—	—
N. Queensferry	...Brick ...	24	4	24	4	—	—
High Valleyfield	...Orlit ...	22	—	22	—	—	—
Strathmiglo	...Swedish Timber	4	—	4	—	—	—
Kingskettle	...Swedish Timber	10	—	10	—	—	—
Kingskettle	...Brick ...	18	2	18	2	—	—
Upper Largo	...Brick ...	8	—	—	—	8	8
Colinsburgh	...Brick ...	18	2	18	2	—	—
Lower Largo	...Brick ...	46	4	46	4	—	—
Gateside	...Brick ...	26	4	26	4	—	—
Freuchie	...Brick ...	24	—	24	—	—	—
Guardbridge	...Brick ...	36	8	36	8	—	—
		1728	64	1792	64	1780	12

It will be noted from these two tables that of 917 temporary houses provided 624 were completed during the year and 293 were still in course of erection. With regard to permanent houses, the position was unsatisfactory since only 12 houses were completed out of a total of 1,792 approved. The remaining 1,780 (1,716 four apartment and 64 five apartment) were in course of erection. Although the result at the end of the year does not make pleasant reading, allowance has to be made for the extreme difficulties which the Housing Committee has encountered in the supply of labour and material.

Apart from the activities of the Local Authority, a certain amount of housebuilding was undertaken by the Scottish Special Housing Association. These houses are being built for miners transferred from other parts of Scotland. The following table indicates the work which the Association has in hand, and it will be noted that here again progress was slow, only 17 Weir houses having been completed during the year.

Site.	Type.	Approved. 4 Apts.	In course of Erection. 4 Apts.	Number Completed. 4 Apts.
Kelty ...	Weir ...	9	—	9
Halbeath ...	Weir ...	8	—	8
Kennoway ...	Brick ...	60	60	—
Comrie ...	Brick ...	68	68	—
Totals ...		145	128	17

While constructional work as indicated in the above tables was proceeding, preparations were made for the erection of a further 1,368 houses. The necessary plans were prepared and approved, and arrangements regarding sites were concluded. By the end of the year, however, no building had been commenced.

Ballingry ...	300 houses	Cruden Type.
Ballingry ...	348 houses	Stuart Type.
Ballingry ...	140 houses	Duplex Type—70 of 3 apts. and and 70 of 5 apts.
Woodside ...	258 houses	Brick.
Kincardine ...	52 houses	Brick.
Cardenden ...	270 houses	Stuart Type.
Total ...	1368 houses.	

Schemes are also in course of preparation for the erection of 324 houses for submission to the Housing and Planning Committees and the Department of Health as follows :—

Halbeath ...	150 houses	Stuart Type.
Kelty ...	138 houses	Stuart Type.
Hill of Beath ...	36 houses	Arcon (Temporary).
Total ...	324 houses.	

### **Private Enterprise.**

The amount of new building under private enterprise has been negligible. Plans for the erection of only 46 new houses were submitted for approval under the Building Byelaws, excluding applications made under the Housing (Agricultural Population (Scotland) Act, 1938. Permission to erect 11 of the 46 houses was refused by the Planning Authority. Private enterprise is under severe handicap in house construction. The size and price of houses is subject to control. This effect, combined with the difficulties of finding labour and material, has greatly limited the activities of private house building. Unless a radical alteration occurs in existing arrangements, private enterprise will play little part in the solution of the housing problem.

### **Three-Roomed Houses.**

There are signs of a tendency towards the erection of three-roomed houses in Fife. On health grounds, any such proposals should be resisted. There is already a super-abundance of houses of three rooms and less in the County. The Census of 1931 showed that 73·3 per cent. of all the houses in Fife were of this small size. The proportion was greater than that for Scotland as a whole where the percentage was 71 and much greater than that for England where the percentage was 15. Under these circumstances, it is not to be wondered at that overcrowding with all its attendant physical, mental and moral evils has presented such a grave problem. On the other hand, it is gravely disturbing that the houses built by the County Council since 1919 have made no substantial contribution towards a reduction of the excessive number of houses of three apartments and less. Of a total of approximately 4,000 houses erected, 2,793 were of three rooms or less. To these numbers must be added the 624 three-roomed temporary houses built in 1946. Since the post-war housing campaign has resulted in the construction of only 12 houses of larger size, the alarming conclusion must be reached that the situation has worsened instead of improved. Under these circumstances, there are definite grounds for disquietude because tables of mortality and morbidity show that it is from these small houses that proportionately the greatest number of deaths among mothers and infants occur and the greatest incidence of preventable disease. In the interests of the safety and welfare of future generations, the County Council should therefore, firmly repel any arguments advanced on grounds of expediency or economy in favour of the erection of houses of three apartments to meet the needs of the population.

### **Building Byelaws.**

In terms of the Building Byelaws, plans were examined during the year and reports thereon were submitted to Local Committees in regard to 46 houses to be built by private enterprise and 5



new buildings other than houses, also for alterations and additions to 105 existing houses to bring them up to modern standards of habitability and alterations to 57 buildings other than houses.

### **Housing (Rural Workers) Acts, 1926-38.**

The provision of grants towards the improvement of houses under the above Acts terminated on 30th September, 1945. Up to the end of 1946 no substitute for these grants had been the subject of legislation. The Housing Survey in 1946 did not cover cottar houses at farms, but was confined to villages and hamlets. Although much was done under the above Acts to improve the condition of farm cottages, there are still many in need of renovation, and it is unfortunate that so far this aspect of the housing programme has been by-passed. The difficulty of obtaining agricultural labour is not made any less by poor rural housing conditions. Although no plans were passed during the year under the Act, there still remains a considerable number of houses for which plans were passed previous to the date of cessation of grants, and on which work has not been completed or has not commenced. Work of improvement under the Acts has not, therefore, entirely ceased and will not do so for some time. During 1946, 25 houses in East Fife and 13 in West Fife were improved under the Acts.

### **Housing (Agricultural Population) (Scotland) Act, 1938.**

Some revival of interest in this Act by proprietors has been apparent during 1946, plans for the erection of 9 three-apartment and 1 four-apartment houses having been approved during the year. An equivalent number of houses has been condemned in accordance with the conditions laid down in the Act before grant is approved. These houses will either be demolished or not in future used for human habitation. The amount of grant available under the Act has been increased by Section 9 of the Housing (Financial Provisions) (Scotland) Act, 1946, which came into force on 6th June, 1947. The grants are increased from £160 to £240 for a three-apartment house and from £200 to £300 for a house of more than three apartments. During 1946, six houses were built under the provisions of the Act.

## WATER SUPPLIES AND DRAINAGE.

---

Preliminary steps were taken towards the construction of a *regional water supply system* under the powers conferred on the County Council by the Fife County Council Order Confirmation Act, 1940. The County Engineer prepared the necessary plans in connection with the duplication of mains in the western part of the County, and a firm of engineers were engaged to survey further catchment areas in the Ochil Hills. The line of the main and of its various branches in the central part of the County was defined. It is expected that actual constructional work will be commenced in 1947, and it is to be hoped that sufficient labour and material will be available to enable the work to be carried out with expedition. The County Engineer has shown considerable foresight in having acquired a supply of pipes. Bacteriological and chemical examinations of the existing water supply undertakings were made during the spring and autumn months, and results were on the whole satisfactory.

No alterations took place regarding drainage arrangements but a commencement was made with the planning of the *Leven Regional Sewer*. A firm of engineers was engaged to survey the line of the main in the lower reaches of the river and to prepare contracts. In view of the general national situation, it is hardly to be hoped that progress towards a commencement of constructional work will be rapid. The highly polluted state of the river, however, demands remedy. The Scottish Advisory Committee on River Pollution, in their report of 1933, describe the Leven as one of the worst polluted rivers in Scotland. Since then, industrial expansion and the development of housing schemes has rendered matters worse. On grounds of public health and of amenity, there is every justification for the proposed works being given priority of attention and of financial support by the Government.

The Leven valley drainage scheme will not complete the County Council's obligations for the provision of adequate drainage facilities in the County. The River Eden is becoming increasingly polluted, and consideration will require to be given to the laying of a sewer along its length. Furthermore, apart from the need for better sewage disposal arrangements in the villages where housing schemes are contemplated, there will grow a demand for improved arrangements in rural districts through which the Regional Water Supply Main passes. The introduction of a piped water supply to farms in these areas will be followed by increased use of water in washing down dairy premises and of water carriage sanitary fittings in farm houses and cottages. Disposal of effluent from these sources is liable to necessitate the provision of public works if souring of land and pollution of streams is to be avoided.

## SCAVENGING.

---

Housing activities are resulting in the enlargement of many communities in the County and in an increased use of public services. Scavenging arrangements are becoming increasingly affected. The County Public Health Committee reviewed the situation during the year and decided to recast existing arrangements on broad lines to meet the altered circumstances. They considered that an amalgamation of special scavenging districts was necessary in the interests of economy and of efficiency, and decided that the following re-grouping should be brought into effect :—

### *Dunfermline Area.*

The Crossford, Limekilns and Charlestown, Tulliallan, Valleyfield and Torryburn districts should form one group.

Blairhall and Saline should form a group.

Milesmark and Parkneuk, Halbeath and Crossgates, North Queensferry and Aberdour should form a group, which should include Fordell.

Cowdenbeath Town Council might be asked to take over scavenging arrangements in Hill of Beath. The Burgh of Culross might be given the opportunity of combining in the arrangements.

### *Lochgelly Area.*

Auchterderran and Kinglassie districts should form a group. Lochore, GlenCraig and Lumphinnans should form a group. Kelty might continue as a separate entity for the time being.

### *Kirkcaldy Area.*

Thornton, Woodside and Coaltown of Balgonie should form a group. Windygates, Milton of Balgonie, along with Kennoway and Star in Wemyss Area, should form a group.

Existing arrangements at Auchtertool, Chapel and Little Raith might continue in the meantime.

Cowdenbeath Town Council might be asked to undertake scavenging at Gray Park.

### *Wemyss Area.*

As above indicated, Kennoway and Star should be included in the Windygates group.

The amalgamated districts of West Wemyss, Coaltown of Wemyss, East Wemyss, Rosie and Methilhill should continue.

### *Anstruther Area.*

The amalgamated districts of Largo, Colinsburgh and Kilconquhar should continue.

*St Andrews Area.*

Leuchars, Balmullo, Kincahle, Strathkinness and Guardbridge should form a group and, with the co-operation of Guardbridge Paper Company, use should be made of the dumping ground on the land which is to be reclaimed on the north bank of the Eden estuary.

*Cupar Area.*

Ceres, Dairsie, Blebo Craigs, Pitscottie, Dura Den, Craigrothie, Springfield, Cupar-Muir and Chance Inn should form a group. Freuchie, Kingskettle, Strathmiglo, Dunshelt and Gateside should form a group. Brunton, Abdie, Letham, Collessie and Giffordtown should form a group.

In this grouping it is desirable that the small Burghs situated in the individual areas should be invited to participate.

The question of depots for the disposal of refuse was considered, and it was agreed that in all cases suitable ground was available or could be obtained.

As regards labour, it was decided that direct labour should be employed, as less expense would be involved and as methods of refuse disposal would thereby be under the direct control of the Local Authority.

The principal difficulty in the way of the scheme for amalgamation of special scavenging districts being brought into operation is lack of transport. It is essential that motor freighters be employed. The Public Health Committee decided to place an order for the following vehicles :—

District.	Present Requirements.		Future Requirements.	
	Lewin.	Thornycroft.	Lewin.	Thornycroft.
Dunfermline ...	—	2	1	—
Lochgelly ...	—	—	2	—
Kirkcaldy ...	1	—	1	—
Wemyss ...	1	—	—	—
Cupar ...	—	3	—	—
St Andrews ...	—	1	—	—
Anstruther ...	—	—	—	—
	2	6	4	—

## FACTORIES ACT, 1937.

---

Under the above Act the Local Authority is concerned in the enforcement of provisions regarding cleanliness, overcrowding, temperature, ventilation and drainage of floors in factories where mechanical power is not used. With a return to post-war conditions, lighting and ventilation has not been interfered with by black-out arrangements. Under present circumstances, conditions of work are, on the whole, reasonably satisfactory, the main sources of complaint being in regard to sanitary conveniences, want of cleanliness, and inadequate drainage of floors.

The following table shows the work carried out by Sanitary Inspectors in the supervision of factories, workshops and work places in the landward areas of the County. In all, 10 Written Notices were served. Many of the defects were of a minor nature and were remedied without undue difficulty.

	Inspection	Written Notices	Want of Cleanliness	Defective or Insufficient Sanitary Conveniences	Other Offences	No. Remedied
Arkcaldy ...	149	2	2	1	—	3
Bochgelly ...	214	—	3	—	—	3
Bemyss ...	112	1	7	—	2	9
Donfermline	49	6	1	5	—	4
Garpar ...	66	—	11	2	3	14
Grassstruther ...	46	—	—	—	—	—
Andrews	29	1	—	—	—	1



## EXCERPTS FROM REPORTS BY SANITARY INSPECTORS.

---

The Sanitary Inspectors submitted to the Local Authority and the Department of Health reports on Sanitary Conditions in their respective areas. The following are excerpts from their reports :—

### Anstruther Area—Mr W. Falconer.

#### MILK SUPPLY.

Regular and frequent visits of inspection were paid to all registered dairy premises in the Area, particularly to dairies producing a designated milk.

One dairyman whose premises had been in need of considerable repair had them reconstructed and changed over, with satisfactory results, from the byre system of dairying to dairying in cow courts.

Another farmer, who has a big retail trade and supplies most of the schools in the area with Tuberculin Tested Milk, bought and adapted premises as a receiving depot. The premises are very suitable for the purpose, and are equipped with a bottle washing machine, refrigerator, &c. Rinses taken from the bottles for bacteriological examination have proved satisfactory. Only T. T. Milk is handled at this depot.

Minor improvements were carried out to other registered dairies, mainly to lighting and ventilation, installation of sterilizing plant, milking machines, &c.

The requirements for the production of designated milk are enforced and are well observed. The structure of the premises is generally satisfactory and any unsatisfactory samples are the result of carelessness on the part of the milkers.

At the end of the year 2 dairies were licenced for the production of Certified Milk, 15 for Tuberculin Tested Milk and 13 for Standard Milk. In addition a Tuberculin Tested Licence was issued in respect of premises where Tuberculin Tested Milk was bottled for retail.

During the year 192 samples were obtained from these licenced premises and from premises for which application for a designated licence had been made for bacteriological examination—140 of the samples were satisfactory. When an unsatisfactory sample was obtained the premises were re-visited and further samples obtained. No dairyman had a consistently poor record, and the designated licence was not cancelled in any instance.

Improvements to premises are called for, where necessary, from time to time and, in every case where premises change hands, the opportunity is taken to have them brought up to the require-

nents of the Dairy Byelaws before a Certificate of Registration is issued to the new occupier. Where the work is of an extensive nature a provisional certificate is issued, allowing the occupier a reasonable time in which to carry out the work.

Two sets of plans for the construction of new byres were dealt with during the year but the work of erection is not yet completed.

During visits of inspection any matters requiring attention were brought to the notice of the dairyman or to the workers themselves. These consist mainly of failure to reject the foremilk or its being milked in to the stall bed, failure to change the water used for washing udders, inefficient grooming of cows and failure to wear overalls. This latter complaint is difficult to remedy in these days of shortages and rationing.

### **Cupar Area—Mr Geo. Mark.**

#### **WATER SUPPLY.**

There are in Cupar Area 42 villages and/or populous areas and of that number only nine have full gravitation supplies. These are at the villages of Strathmiglo, Gateside, Newton of Falkland, Breuchie, Kingskettle, Balmalcolm, Dunshalt and Pitlessie. Of the other villages supplies are dependant entirely on springs and wells. Supply facilities at such villages have in instances been sampled for bacteriological and chemical examination, and with few exceptions did the results prove satisfactory. The conditions at one village may be instanced to give a general outline of the sources available. At this village water for all purposes is drawn entirely from open dip wells. Some of these are situated in gardens, while others are on road verges. There are seven such wells, two of which are used by the village at large and can therefore be termed public supplies. All are unprotected and subject to pollution of varying degrees. Fortunately, however, although the results of the analysis did not pronounce any of these wells unfit for drinking and general domestic purposes, they must at all times be viewed with suspicion.

The conditions outlined are not by any means peculiar to a specific village. It therefore cannot be emphasised too clearly the urgency with which many villages await the County Regional supply.

Regarding water to those villages having a full gravitation supply, routine sampling was undertaken throughout the year. The results generally showed a reasonable standard of purity. At Strathmiglo the supply is from a burn and is filtered by slow sand filters. Analysis indicated that the water after filtration was of satisfactory purity. At Dunshalt and Kingskettle the supplies are from springs and are not treated in any way. At both places analysis showed a remarkably clean water.

The supply to Pitlessie is from shallow springs and is on occasions augmented by burn water. Sand filtration is carried out, but even so it is only with careful management that a fair standard of purity is maintained. The results of the analysis of this water before filtration indicated that it is of doubtful potability, nevertheless after filtration there was a marked improvement.

In addition to the sampling of public supplies considerable time was spent investigating private supplies at farms for domestic and general farm purposes. Where analysis showed an insufficient degree of purity, proprietors were called upon to carry out varied works of improvement. A total of 36 samples were taken throughout the year.

Worthy of mention are circumstances regarding the water supply to a specific farm which gave rise to considerable concern. At the farm in question a new well was sunk to augment the farm supply generally. On analysis the results chemically were considered unsatisfactory, but bacteriologically the indications were that it was a fairly clean water. The disturbing feature chemically was the fact that the water had a gassy odour and taste, and seemed to indicate contamination from a source peculiar to the exhaust from an oil engine. It was only, however, after a prolonged period of investigation that the actual cause of the trouble was revealed. In an endeavour to kill the growth of weeds, spent oxide from Gas Works purifiers had been spread on the land adjoining the well. The spent oxide used in the gas purification process absorbs sulphuretted hydrogen yielding a mixture of ferrous and ferric sulphides which re-generated by exposure to air and moisture, resulting in sulphure deposits. The result is that ferrocyanides are formed by the interaction of other chemicals, some of which are poisonous and could therefore never be depended upon being rendered innocuous. The gas odour in the water was sufficient evidence to prove that the spent oxide had reached the supply and contaminated it to such an extent as to render it unfit for domestic use for some considerable time.

During the year work was commenced at Craigrothie in laying water mains throughout the village. The supply is by an arrangement with Cupar Town Council. A similar arrangement has been agreed in respect of Springfield, but work on laying mains has so far not commenced.

As expressed in previous reports the lack of an adequate water supply throughout Cupar Area presents many difficulties, and of first importance if any measure of success is to be attained in housing and other amenities. This is specially urgent in the north-east area where villages and farm places are dependant entirely on spring or pump well supplies.

## Dunfermline Area—Mr A. M. Thomson.

### RIVERS POLLUTION PREVENTION ACT.

The pollution of the Bluther Burn by coal washings from Blairhall Colliery has given some cause for concern during the year. The complaint is one of long standing. Unfortunately, some years ago, for reasons best known to the management, the settling ponds were allowed to become filled up and became useless as such, with the result that the effluent from the coal washer was simply running over the accumulated silt and discharging into the stream, grossly polluting it. At that time I took the matter up with the management and the ponds were abandoned. Pumping machinery was installed, and the effluent was pumped into a huge "basin" formed on top of the bing in the hope that it would be efficiently filtered as it seeped through the bing to the stream. This arrangement appeared to be fairly satisfactory for a year or two until the "basin" on top of the bing also became filled up.

During the past year it was found that a very black, dirty effluent was again discharging into the stream, and I was again compelled to call upon the management for abatement measures. I regret to say that repeated letters resulted only in very temporary improvements, and I was ultimately constrained to resort to more forceful language in my communications. The management are now arranging for the conveyance of the washer effluent to a large subsidence in a field to the south-west of the colliery, which field it is intended to utilise as a huge settling pond. One cannot condemn beforehand any scheme the management may have prepared, but it is evident that no plan will succeed unless arrangements are simultaneously made for the periodical removal of the accumulating "duff," and I have warned the management that if the very serious pollution of the Bluther Burn continues the provisions of the Act will require to be rigidly enforced. One sympathises with them in the very great difficulties they are encountering due to shortage of labour, but the pollution of the past few years cannot be condoned.

One aspect of our ceaseless endeavour to secure improved housing conditions has given me much food for thought during the past decade or so. The Housing (Rural Workers) Acts are now past history although, we hope, only temporarily so. But the advent of these Acts brought with it what is, to my mind, undoubtedly a problem. I refer to the resulting pollution of our burns and streams all over the countryside with the drainage effluents from rural houses which have been provided with modern sanitary conveniences. The problem bristles with difficulties and, I venture to say, does not admit of an immediate remedy. On the one hand we have the pressing need for the provision of modern sanitation to many more rural houses, and, on the other, the equally urgent need for preserving the purity of our streams and the amenity of the countryside.



I do not wish to provoke alarm, or to give the impression that most of our streams are little better than open sewers. Such is not the case. One is aware of the purifying effect of dilution and of sunlight and air as the waters ripple along their course over pebble and stone. But I do contend that we should pause awhile and consider whether the further pollution of our streams, with perhaps increasing impetus as the materials and labour situation becomes easier, should be condoned, or even made inevitable as the result of our activities. The ultimate solution may lie in the building of rural houses in groups or hamlets, in such numbers as will permit of the cost of the provision of efficient sewage purification plant to render the effluents comparatively pure and harmless before being discharged into the streams.

### **Lochgelly Area—Mr J. S. E. Riddle.**

#### **DRAINAGE.**

There are five Special Drainage Districts in the area—Auchterderran, Lochore and Glenraig, Kelty, Lumphinnans and Kinglassie. I regret, however, to have to say that all the sewage is flowing more or less crude into the River Ore or one of its tributaries.

Underground workings have played havoc with the purification works at Auchterderran and Kelty. Owing to the unsettled nature of the site no works were erected in the Lochore and Glenraig District. The Lumphinnans District sewers join up with the Lochgelly Burgh sewer and the sewage is discharged crude into the River Ore.

Kinglassie District has no proper drainage system. Sewers were laid to serve different developments of the Housing Schemes. These discharge into septic tanks, and the effluent goes into the Lochty Burn which flows in front of a row of cottages which also discharge their sewage into it. It is not satisfactory, as this burn which flows through the district and takes all the sewage, is sometimes very low in summer. A proper system of sewers is required in this village so that the effluent could be discharged into the burn clear of the district and so constructed as to link up with the Leven Purification Scheme when it is carried out.

The sewers in Auchterderran District give considerable trouble. Most of the main outfall and certain other portions have been affected by subsidence and have very little fall. A portion of the main outfall at Lumphinnans is also affected. During the year intimations were received of coal being taken out below parts of the sewers at Lumphinnans, Lochore, Kelty, Kinglassie, and Auchterderran.

The sewers in the Special Districts would be put in between 1910 and 1923, and I am afraid the vast extension of these districts was not foreseen. I am doubtful, therefore, if the original sewers will be able to take the considerable extra volume of sewage which



will be added to them when all these schemes are completed, as in recent years sewers have been laid to serve new housing sites containing from 100 to 600 houses.

Outside the Special Districts the drainage of single or groups of houses where water closets are provided discharges into septic tanks, which, in turn, discharge into field drains or the nearest ditch or stream.

### **St Andrews Area—Mr R. Just.**

#### **SCAVENGING.**

There are three Scavenging Districts in the Area, viz.:—Leuchars, Guardbridge, and Kingsbarns. At the two former places collection of refuse is carried out by contractor three days per week. Kingsbarns was formed into a Scavenging District during the war years but no system of refuse collection was undertaken as no contractor could be obtained to undertake the work. At the time writing arrangements have just been completed with the Burgh authorities in Crail for a weekly collection which commenced on 1st October, 1947.

Reference was made in the Annual Report for years 1939-45 to the question of amalgamation of Special Scavenging Districts and to the employment of direct labour which generally gives more satisfactory results. If such labour and equipment were available the extension of the services to include the villages of Almullo and Strathkinness has much to commend it.

## PUBLIC HEALTH SERVICES IN BURGHS.

---

The following is a summary of public health activities in Burghs for which the County Medical Officer acts as Burgh Medical Officer and a brief report on transferred services in other Burghs which still retain the services of their own Medical Officer of Health for duties not transferred under the Local Government (Scotland) Act, 1929.

### (1) Leslie Burgh.

*Infectious Diseases.*—During the year 16 cases of infectious diseases were notified, viz. :—diphtheria, 4; erysipelas, 1; primary pneumonia, 3; puerperal fever, 1; pulmonary tuberculosis, 5 and non-pulmonary tuberculosis, 2. No cases of scarlet fever occurred in the Burgh in 1946.

*Housing.*—Owing to continued lack of repair and maintenance since 1939 many houses in the Burgh have reached the stage of being unfit for habitation but lack of new houses makes it impossible to close them meantime. No survey was made in 1946 to ascertain the number of unfit and overcrowded dwellings, but it is hoped to make investigation in 1947. Scarcity of labour and material over a number of years has had an adverse effect on existing housing conditions, and it is estimated that well over 100 existing dwellings are now unfit for occupation.

Sixteen new permanent houses were in course of erection during the year. Ground has been acquired for a further instalment of 250 houses and the site is now being developed.

Overcrowding is very prevalent, but as stated above no survey was made to ascertain the exact position in 1946. In August, nine military huts which have been vacated by the Army Authorities were occupied by squatter families from outwith the Burgh.

*Water Supply.*—The Burgh water supply is derived from springs and Balgillie Burn. It was only necessary to draw from Kirkcaldy Burgh supply on two days while repairs were being carried out at Balgillie Reservoir. There is more than sufficient water from the two sources above-mentioned for the needs of the Burgh but storage accommodation is inadequate. In July approval was given by the Department of Health to construct an impounding reservoir on the Balgillie Burn but the work had not been commenced as of 31/12/46. Samples of Burgh water were taken for bacteriological examination and chemical analysis before and after filtration in the course of the year, and reports by the County Analyst and Bacteriologist indicated that the samples were all of a good quality and entirely satisfactory.

*Drainage.*—The sewage disposal works at the north and south side of the Burgh are both antiquated and incapable of dealing

with more than ordinary dry weather flow. The present filters readily become overloaded. Even the proverbial washing day overtaxes their capabilities and in wet weather the position is aggravated. A scheme was drawn up for the Burgh by Messrs Blyth & Blyth, C.E., Edinburgh, for reconditioning the works on the north side and enlarging the existing plant, also the relaying of sewers in the northern area, enlarging these where necessary and providing a new sewer from Cabbagehall area to link up with the sewer in the southern area, and providing a new sewer in a tunnel beneath High Street to bring all sewage from the southern area to the northern works. It was also proposed to carry the effluent from the works by pipe to the Lothrie Burn instead of running it into the Cambie Burn as at present. This arrangement would give much greater dilution of the effluent—approximately 20 to 1 instead of only  $3\frac{1}{2}$  to 1 if discharged into the Cambie Burn. However, approval to the scheme was not given by the Department of Health and the Town Council were asked to consider the advisability of obtaining accommodation in the proposed Leven Valley Sewer. The latter proposal undoubtedly has many advantages and would offset the cost of reconstruction of the existing works and of maintenance in years to come. So far no decision has been reached.

*Vital Events.*—In 1946 there were 52 live births registered (M26 and F26) and marriages numbered 21. There were 26 deaths (M11 and F15) but no infant deaths under 1 year were recorded. The chief causes of death were heart disease 11, cerebral haemorrhage, diabetes 3, cancer 2, and bronchitis 3.

## (2) Lochgelly Burgh.

*Infectious Diseases.*—During the year forty cases of infectious diseases were notified as follows:—Scarlet fever 10, diphtheria 1, erysipelas 1, primary pneumonia 15, pulmonary tuberculosis 8, non-pulmonary tuberculosis 5.

The incidence of infectious diseases was low apart from primary pneumonia which showed an increase of 12 cases over the number notified in 1945. On the other hand scarlet fever showed a decrease of 17 cases from the number recorded in 1945, and there were four fewer cases of diphtheria.

*Housing.*—A survey of the Burgh was made during the year to ascertain the number of unfit dwellings and the position regarding overcrowding and sub-letting. It was found that 349 houses could no longer be regarded as fit for habitation while 990 houses were overcrowded. The number of new houses required to rehouse families in unfit dwellings was 402 and to abate overcrowding 1,036, making a total of 1,438 houses. Allowing for a theoretical process of decanting and assessing overcrowding on the standards of the

Housing (Scotland) Act, 1935, but assessing rehousing on the basis of two persons per bedroom, the total number of houses required is 1,026.

Building progress, as in other places, has been very slow mainly due to shortage of materials. Only 34 temporary houses of a total of 76 Arcons were completed and occupied during the year, while 44 brick and 30 Swedish timber houses were still in course of erection at 31/12/46.

*Water Supply.*—The Burgh water supply is as described in previous reports. The storage capacity of Lochornie reservoirs is insufficient for the needs of the Burgh and, as in former years, the supply had to be augmented by drawing from Fife County and Cowdenbeath Burgh supplies. Samples of Burgh water submitted for chemical analysis and bacteriological examination during the year gave satisfactory results.

*Drainage System.*—All sewers were maintained in efficient working order during the year. All sewage in crude state and without previous treatment goes into the River Ore.

*Cleansing.*—All household refuse is dealt with by controlled tipping at New Farm coup. Streets throughout the Burgh were kept in a clean and satisfactory condition.

*Vital Events.*—During the year 199 live births were registered (M. 99, F. 100). There were 8 stillbirths and 5 illegitimate births. The marriages registered numbered 116 and there were 103 deaths (M. 64, F. 39). Eleven children under the age of 1 year died and the infantile mortality rate was 55 per 1,000 live births. The chief causes of death were :—heart disease 30, cancer 14, cerebral haemorrhage 9, bronchitis 10, pneumonia 2, pulmonary tuberculosis 3, nephritis 6, congenital debility, prematurity and malformation 6, old age 4, violence 4.

### (3) Markinch Burgh.

*Infectious Diseases.*—During the year fifteen cases of infectious diseases were recorded :—Scarlet fever 8, diphtheria 3, primary pneumonia 3, puerperal fever 1—total 15. The incidence of infection was low.

*Water Supply.*—The Burgh water supply remains as previously reported. Insufficient storage accommodation is available and much water runs to waste each year. All plant was maintained in efficient working order during the year. Negotiations were entered into between the Town Council and Fife County Council regarding augmentation of the Burgh supply from Fife County Region Scheme but no decision on the matter had been reached at the end of the year.

*Drainage and Sewage Disposal.*—The sewage works continue to function satisfactorily during the year but are now working



o capacity. As housing development progresses the existing works will be overtaxed, and consideration should, therefore, be given to the matter. The alternatives are either extension of the existing works or linking up with the River Leven Regional Scheme. In view of constructional costs at the present time and the fact that all maintenance costs would disappear if the Burgh came into the Regional Scheme, the latter appears to be the more favourable of the alternatives.

*Cleansing.*—All refuse is removed outwith the Burgh to Whins Quarry and got rid of by controlled tipping. The Burgh has always a clean and tidy appearance, and cleansing has been maintained very satisfactorily during the year.

*Housing.*—As in other places there is a considerable amount of overcrowding and sub-letting in the Burgh. Quite a number of houses have reached the stage when they can no longer be considered fit for habitation, but must perforce remain occupied until such time as new houses are provided to replace them. An extension of the Burgh boundary, amounting to 57 acres, was granted by the Sheriff in May, 1946, for housing purposes. This ground was surveyed and levelled, and a plan was prepared for proposed layout of roads and services.

During the year 25 Arcon houses (temporary) were erected and occupied, and 38 permanent houses were in course of erection.

*Vital Events.*—There were 50 live births registered in the Burgh during 1946 (M. 23, F. 27). Illegitimate births numbered 1 and there was one still-birth. The number of marriages registered was 22 and there were 34 deaths (M. 18, F. 16). Three children under the age of one year died and the infantile mortality rate was 0 per 1,000 live births. The chief causes of death were:—Heart disease 15, cancer 4, pulmonary tuberculosis 2, pneumonia 2, cerebral haemorrhage 2, and meningitis 2.

#### (4) **Leven Burgh.**

*Infectious Diseases.*—During the year 46 cases of infectious diseases were notified as follows:—Scarlet fever 11, diphtheria 5, erysipelas 2, primary pneumonia 7, influenzal pneumonia 4, cerebrospinal fever 3, ophthalmia neonatorum 2, puerperal fever 1, pulmonary tuberculosis 7, non-pulmonary tuberculosis 4—Total 46. Fewer cases of scarlet fever and diphtheria were recorded than in 1945, there being 5 fewer cases of scarlet fever and 9 of diphtheria in 1946. Both primary and influenzal pneumonia showed increases of 5 and 4 over the number of cases notified in 1945, but otherwise the incidence of disease was satisfactory.

*Housing.*—There are meantime in the Burgh a large number of old insanitary houses which are unfit for habitation but until permanent houses can be provided to replace them they must



perforce remain occupied. Numerous complaints were received from tenants in unfit houses during the year asking for certificates to enable them to get a modern house but, unfortunately, few houses were available. No permanent houses were completed during the year but 70 aluminium pre-fabricated houses were finished and all were occupied. Overcrowding and sub-letting in the Burgh are known to be prevalent but no actual survey was undertaken to ascertain the exact number of houses required for these and to replace unfit dwellings.

At 31st December, 1946, 72 permanent houses were in course of erection.

*Water Supply.*—This matter has been fully dealt with by the Sanitary Inspector in his Annual Report and need not be reiterated. In view of the large building programme anticipated for the Burgh in the next few years, great care will have to be exercised in the use of water until this can be made available from Fife County Regional Scheme.

*Drainage and Sewage Disposal.*—All sewers were maintained in efficient working order during the year. The sewage in crude state is run to the Firth of Forth and River Leven.

*Scavenging.*—Cleansing of streets was efficiently carried out and the Burgh has at all times a clean and tidy appearance. All refuse is disposed of by controlled tipping at two dumps, and these have been well maintained during the year.

*Vital Events.*—During the year 178 live births were recorded (M. 82, F. 96). There were 13 illegitimate births and 4 still-births. There were 79 marriages registered and the deaths numbered 114 (M. 55, F. 59). Eight children under the age of one year died in 1946 and the infantile mortality rate was 45 per 1,000 live births. This is a fairly satisfactory figure.

The chief causes of death were :—Heart disease 34, cancer 1, cerebral haemorrhage 10, other circulatory diseases 7, nephritis 1, congenital debility, prematurity and malformation 6, pneumonia 1, bronchitis 3, violence 3.

### (5) Inverkeithing Burgh.

*Infectious Diseases.*—During the year 21 cases of infectious diseases were recorded as follows :—Scarlet fever 3, diphtheria 1, erysipelas 2, pulmonary tuberculosis 7, non-pulmonary tuberculosis 6—Total 21. The incidence of disease was low. Scarlet fever notifications were 13 fewer than in 1945, and there were 1 case of pneumonia as compared with 6 cases notified in 1945.

*Housing.*—While no complete survey was made in the Burgh to ascertain the amount of overcrowding, it is known that both sub-letting and overcrowding are acute. A rough survey was

made to find out the number of unfit houses which should be replaced. There are approximately 170 houses so defective that they could not be made habitable within reasonable cost and should be dealt with under Section 16 of the Housing (Scotland) Act, 1930, but until new houses are provided to replace them there is little point in taking immediate action.

During the year 33 temporary houses were completed and occupied and 49 other temporary houses were in course of erection. In addition, 48 permanent houses were being built but none has been completed so far.

*Water Supply.*—The Burgh is supplied by Fife County Council from Dunfermline and District water supply. Ample water of excellent quality is available for the needs of the Burgh.

*Sewage Disposal.*—All sewage in crude state is discharged to the Firth of Forth by two outfall pipes. There is no evidence of pollution of the foreshore with sewage, the currents being favourable for dispersal of the effluent. Sewers were maintained in efficient working order during the year, but as they are already working to practically full capacity, housing development, as it progresses, will overtax the system and steps will require to be taken to deal with this matter.

*Cleansing.*—The cleansing of the Burgh has been efficiently carried out and all refuse is disposed of by controlled tipping.

*Vital Events.*—During the year 99 live births were recorded (M. 52, F. 47). There were 5 illegitimate births and 2 still-births. The number of marriages registered was 43 and the deaths numbered 6 (M. 28, F. 28). There were 8 deaths in infants under 1 year of age and the infantile mortality rate was 80 per 1,000 live births, a high figure.

The chief causes of death were—Heart disease 10, cancer 8, cerebral haemorrhage 6, bronchitis 5, other respiratory diseases 3, congenital debility, prematurity and malformation 5, old age 5.

#### (6) Cowdenbeath Burgh.

*Infectious Diseases.*—The number of cases of infectious diseases in the Burgh in 1946 was 166 as follows:—Scarlet fever 23, diphtheria 3, erysipelas 7, primary pneumonia 94, influenzal pneumonia 2, non-notifiable pneumonia 2, dysentery 1, cerebro-spinal fever 2, malaria 2, encephalitis lethargica 1, ophthalmia neonatorum 5, perperal fever 2, puerperal pyrexia 1, pulmonary tuberculosis 11, non-pulmonary tuberculosis 6—Total 166.

Apart from primary pneumonia, which showed an increase of cases over the number notified in 1945, fewer cases of infectious diseases were notified. Scarlet fever showed a drop of 12 cases, diphtheria 3 cases, erysipelas 8 cases, and ophthalmia 11 cases from the previous year.

*Housing.*—In the previous Annual Report the need for additional houses in the Burgh and the acuteness of the housing problem were stressed. The position at the end of 1946 was very little better as only 49 temporary houses were completed; 21 other temporary houses and 12 permanent houses were in course of erection. There are a great many old and unfit houses which should be demolished as soon as other houses are provided to replace them. In certain areas mineral subsidence has caused much damage to property and replacement is the only remedy. Sub-letting and overcrowding are no less acute than before, and the previous estimate of the Burgh's needs at 1,300 houses still holds good.

*Water Supply.*—With the two reservoirs at Loch Glow and Roscobie the Burgh has an ample supply of good water for all need and more than sufficient for future housing development. The arrangement whereby Lochgelly Burgh can draw from Cowdenbeat in emergency still holds good, and every summer a considerable volume of water from this source goes to tide over shortage in Lochgelly Burgh.

*Sewage Disposal.*—All sewage from the Burgh, with the exception of a small section of Perth Road, goes to the sewage disposal works where it is dealt with on the activated sludge system. The works erected in 1932, continue to function very satisfactorily and are capable of dealing with all sewage from the Burgh, including the new housing schemes proposed. Perth Road area, which is meantime outwith the part of the Burgh dealt with by the sewage works is to be linked up by new sewer with the works so that the entire sewage from the Burgh will be purified before passing into Lochgel Burn.

All drains and sewers were maintained in working order, but frequently considerable damage to sewers is caused by subsidence following coal extraction. This necessitates careful watching by the part of the Burgh Surveyor, and often fairly extensive repairs to sewers and drains have to be carried out.

*Refuse Disposal.*—All the town refuse is disposed of by controlled tipping, and cleansing of the Burgh streets is very well done.

*Vital Events.*—Live births recorded in 1946 numbered 23 (M. 139, F. 127). There were 10 illegitimate births and 6 stillbirths registered. Marriages during the year numbered 127 and there were 153 deaths (M. 90, F. 63). Ten infants under the age of one year died during the year, and the infantile mortality rate was 37.5 per 1,000 live births. This is a fairly satisfactory figure.

The chief causes of death were:—Heart disease 42, cerebral haemorrhage 24, cancer 22, bronchitis 14, pneumonia 8, congenital debility, prematurity and malformation 4, old age 4, tuberculosis (pulmonary 3, non-pulmonary 1).

(7) **Kinghorn Burgh.**

*Infectious Diseases.*—There were 16 cases of infectious diseases notified in 1946 as follows:—Scarlet fever 3, erysipelas 1, primary pneumonia 2, influenzal pneumonia 2, dysentery 3, pulmonary tuberculosis 5—Total 16. The incidence of disease was low and nothing worthy of comment occurred during the year.

*Housing.*—There is a considerable number of houses in the burgh which can no longer be regarded as fit for habitable purposes. In addition, overcrowding and sub-letting are still fairly prevalent but no survey was actually made during the year to ascertain the actual needs under each category. Only one new house was completed during the year—a house of 4 apartments built for farm workers. Fifty-two permanent houses were in course of erection but none of these was completed.

*Sewage Disposal.*—All Burgh sewage in crude state is discharged to the Firth of Forth from two main sewers. Tidal action is favourable for dispersal of the effluent and the foreshore was unaffected in any way.

*Cleansing.*—The cleansing of the Burgh was maintained at a high level during the year, and the streets have always a clean and tidy appearance. All refuse is disposed of by controlled tipping at North Myres dump.

*Water Supply.*—The Sanitary Inspector has reported fully on the Burgh water supply in his report and reiteration is unnecessary. On the whole the Burgh supply is not very satisfactory. Storage accommodation is much too small for the needs of the Burgh. By agreement with Kirkcaldy Burgh, water is drawn from their supply when required, but here again the Kirkcaldy Burgh main from which Kinghorn Burgh is supplied is too small. This results in a definite shortage of water at Kinghorn during certain periods. With the additional houses now being built and the further need of the Burgh for still more houses at no distant date, steps should be taken to improve the water supply of the Burgh.

*Vital Events.*—During the year there were 46 live births recorded (M. 22, F. 24). There were 2 illegitimate births and the marriages registered numbered 16. The deaths recorded in 1946 numbered 32 (M. 16, F. 16). Four infants under the age of 1 year died and the infantile mortality rate was 87 per 1,000 live births—an unsatisfactory figure.

The chief causes of death were:—Heart disease 8, cerebral haemorrhage 5, cancer 5, congenital debility, prematurity and malformation 3, pulmonary tuberculosis 1.

(8) **Buckhaven and Methil Burgh.**

*Infectious Diseases.*—In 1946 there were 178 cases of infectious diseases as compared with 196 in 1945. The incidence of infection



was relatively low, and with the exception of pneumonia, which showed an increase of 15 cases, other diseases showed decreases in the number of cases recorded. There were 13 fewer cases of scarlet fever and 17 of diphtheria than in 1945. The health of the Burgh was relatively good during the year.

*Housing.*—The housing position in the Burgh is still acute and overcrowding excessive. There are over 2,000 overcrowded houses in the Burgh, of which 650 have sub-let rooms. In addition there are 833 unfit houses, the bulk of them being so defective that they could not be made fit for habitation within reasonable cost. The deficit under these two heads will require to be met before any houses can be provided for industrial development and to meet the normal growth of population. During the past 8 years the average increase in population as shown by excess of live births over deaths was 170 annually, there having been 3,058 births and 1,694 deaths during that period.

In 1946, 150 temporary houses were completed and 100 more were in course of erection. No permanent houses were completed during the year but there were 504 in course of erection.

*Sewage Disposal.*—As indicated in previous reports, all sewage in crude state is discharged direct to the Firth of Forth. No complaints were received during the year nor was there any sign of soiling of the foreshore.

*Refuse Disposal.*—All Burgh refuse is disposed of by controlled tipping and the dumps were well maintained, the surface being well covered with earth as dumping progressed. As in former years a rat catcher was engaged in rat destruction on the dumps.

*Vital Events.*—In 1946 there were 419 live births in the Burgh (M. 210, F. 209). Illegitimate births numbered 35 (M. 17, F. 18) and there were 19 still-births (M. 9, F. 10). The marriages registered during the year numbered 201 and the deaths 209 (M. 119, F. 90). Twenty-two infants under the age of one year died during the year, and the infantile mortality rate was 52.5 per 1,000 live births.

The chief causes of death in 1946 were as follows:—Heart disease 47, cancer 27, cerebral haemorrhage 20, bronchitis 16, pneumonia 14, old age 16, congenital debility, prematurity, and malformation 9, tuberculosis 10 (pulmonary 8, non-pulmonary 2), diseases of genito-urinary system 7, general diseases 6, other circulatory diseases 5, other respiratory diseases 4.

#### (9) Culross Burgh.

*Infectious Diseases.*—During the year there were 13 cases of infectious diseases notified as follows:—Scarlet fever 2, primary pneumonia 8, influenzal pneumonia 1, ophthalmia neonatorum 1, non-pulmonary tuberculosis 1—Total 13.



*Housing.*—It has not yet been possible to undertake a survey of housing in the Burgh to ascertain the need for new houses to replace unfit structures and to abate overcrowding. During the year work was started on 12 new houses at Erskine Brae. Plans for 18 additional houses were approved for erection on a site to the west of the Burgh, and work on these was started but no houses were completed during the year.

*Water Supply.*—The Burgh is supplied by water from Glen-evon through agreement with Fife County Council. Ample water of excellent quality was available for all purposes during the year.

*Drainage.*—The Burgh drains and sewers were efficiently maintained and all sewage in crude state was discharged to the Firth of Forth below low water mark. No complaints of soiling of the foreshore with sewage were received during the year.

*Vital Events.*—During the year there were 17 live births (M. 7, F. 10) in Culross Burgh. The marriages numbered 22 and there were 6 deaths (M. 2, F. 4). One child under the age of one year died, giving an infantile mortality rate of 58 per 1,000 live births.

#### (10) **Burntisland Burgh (Transferred Services).**

*Infectious Diseases.*—During the year 77 cases of infectious diseases were recorded as follows :—Scarlet fever 13, diphtheria 1, erysipelas 1, primary pneumonia 26, influenzal pneumonia 1, dysentery 15, malaria 2, ophthalmia neonatorum 1, tuberculosis 15 (pulmonary 10, non-pulmonary 5)—Total 77. This is an increase of 37 cases over the number notified in 1945, and is accounted for by an increase of 17 cases of pneumonia, 14 of dysentery and 12 of tuberculosis. The incidence of disease was otherwise satisfactory.

*Vital Events.*—During the year there were 93 live births recorded in the Burgh (M. 40, F. 53). There were 10 illegitimate births and 1 still-birth. Forty marriages were registered in 1946 and the deaths numbered 63 (M. 36, F. 27). Two children under the age of one year died and the infantile mortality rate was 21·5 per 1,000 live births, a very satisfactory figure.

The chief causes of death during the year were :—Heart disease 7, cancer 10, cerebral haemorrhage 8, pulmonary tuberculosis 3, bronchitis 3, pneumonia 3, old age 3.

#### (11) **Burgh of Anstruther.**

*Water Supply.*—Practically no complaints were received during the year regarding the water supply and the needs of the Burgh were provided for.

The United Burghs have now three reservoirs at their disposal—Armbree, the largest, with 50 million gallons; Balmonth—now reduced to 5 millions, and the two small reservoirs at Ovenstone

with  $7\frac{1}{2}$  millions. The filters are regularly cleaned and registers kept by the water officers. Scouring of the main distributing pipes was carried out at intervals throughout the year, and water services and connections to new or altered premises inspected before being covered in.

*Drainage.*—Nothing worthy of comment occurred in connection with the drainage of the Burgh, or with the sewage outfalls to the sea, and practically no expense was incurred. All drainage work in connection with new or altered premises was tested on completion. No new work of major importance was carried out throughout the year.

*Housing.*—Sites have been prepared and services introduced for a first development of 50 houses. This makes the fact that the Burgh was only allowed six houses for the year all the more disappointing. It is quite evident that a solution to the housing problems of the Burgh has hardly been commenced, and unless present restrictions and shortages can be removed it is difficult to see how any substantial progress can be made. In the absence of a new survey of houses in respect of overcrowding and unfitness it is not possible to say what the actual housing needs of the Burgh are at the present time. Whatever the exact position, there is no likelihood of needs being met in the near future.

*Scavenging and Cleansing.*—Since the introduction in 1935 of the system of refuse disposal, using a freighter, closed bins, and the disposal of refuse by controlled tipping at Blacklaws Quarry, conditions have been generally satisfactory, and these conditions have been continued during 1946. Refuse is removed by daily collection.

*Factories and Workshops.*—There are now approximately 25 factories, workshops and workplaces on the register. Throughout the year visits of inspection were paid to these premises, and notices calling for improvement were served on the owners. Satisfactory remedies were provided in all cases.

No serious objection can be taken to the conditions under which people are employed in the United Burghs so far as concern Public Health requirements.

*Milk Supply.*—There are two producers of designated and two of ordinary milk in the Burgh. One of the former and both the latter retail milk in the Burgh. Milk is also retailed from ordinary dry dairy and by two producers of ordinary milk in the landward area. A receiving depot for milk has been set up in the Burgh by a designated producer, at which milk is bottled for retail and also for supply to schools.

*Infectious Diseases.*—The following number of cases of Infectious diseases were notified in the Burgh during 1946:—

Cerebro-Spinal Fever	...	...	...	1
Erysipelas	...	...	...	3
Acute Influenzal Pneumonia	...	...	...	2
Acute Primary Pneumonia	...	...	...	2
Other Pneumonia	...	...	...	1
Puerperal Pyrexia	...	...	...	1
Paratyphoid Fever	...	...	...	3

The total number of cases (14) is considerably less than the 25 cases notified in 1945 due mainly to the reduction in the number of cases of paratyphoid fever from 15 in 1945 to 3 in 1946.

#### Vital Statistics.

Births	...	...	...	...	68
Marriages	...	...	...	...	26
Deaths	...	...	...	...	44
Deaths of Infants under 1 Year	...	...	...	...	1

The three main causes of death were—Heart disease 19, cancer 10, and cerebral haemorrhage, &c., 6.

#### (12) Burgh of Crail.

*Water Supply.*—Practically no complaints were received throughout the year regarding the quality or quantity of the water supply. The Ribbonfield Bore continue to give good service. Samples were taken at intervals from the clear water wells and household taps for bacteriological and chemical examination, and results were satisfactory. The Royal Naval Air Station was supplied throughout the year with filtered water at the price of 1s per 1,000 gallons.

*Drainage.*—The main sewer outfalls to the sea continue to operate efficiently. No complaints were received regarding the system of sewage disposal, and the foreshore remained free from pollution. The drainage work of all new buildings and sewer alterations were inspected and tested on completion. No new work of major importance was carried out during the year.

*Housing.*—There seems no possibility of the housing programme previously decided on being completed. The number of new houses allotted to the Burgh is only two, and even these may not easily be completed in a reasonable time owing to lack of materials. A site for an additional 16 houses is prepared and the main services introduced. Five plans have been passed for the alteration and reconstruction of bombed houses at Temple Crescent. There still remain 6 unfit and ruinous houses in the Burgh, and there is also an undetermined amount of overcrowding.

*Cleansing and Refuse Disposal.*—The arrangement for the disposal of trade and domestic refuse continues unchanged, all refuse being disposed of at the Burgh Dump, a disused quarry, about one mile from the Burgh. The face of the dump is daily top dressed with earth or other suitable material and no complaints were received.

*Factories and Workshops.*—There are now 41 Factories and Workshops on the register. Throughout the year visits of inspection were made to these premises by the Sanitary Inspector and any complaints or nuisances reported were dealt with.

*Milk Supply.*—The position remains unchanged, there being one producer of designated milk in the Burgh and one retailer of undesignated milk.

*Infectious Diseases.*—The following table shows the number of cases of infectious diseases notified in the Burgh during 1946 :—

Diphtheria	...	...	...	...	...	1
Erysipelas	...	...	...	...	...	1
Scarlet Fever	...	...	...	...	...	3
Pulmonary Tuberculosis	...	...	...	...	...	2
Non-Pulmonary Tuberculosis	...	...	...	...	...	1

The total number of cases was two less than in 1945.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	...	32
Marriages	...	...	...	...	...	10
Deaths	...	...	...	...	...	21
Deaths of Infants under 1 Year	...	...	...	...	...	Nil

The main causes of death were—Heart disease and other circulatory diseases 9, cerebral haemorrhage, &c. 3, and cancer 2.

### (13) Burgh of Elie and Earlsferry.

*Water Supply.*—The supply of water available to the Burgh was ample to meet all requirements and the quality gave no cause for complaint. As previously reported the main distribution pipes are scoured periodically. Samples were also forwarded to the Analyst for quality testing.

The Town Council intend in the near future to proceed with the laying of a new 6-in. asbestos water main at the west end of the Burgh (High Street, Earlsferry).

*Drainage.*—No complaints were received as to the efficiency of the public sewers, which receive regular flushing. The main outfalls lead into the sea near low water mark and no complaint of pollution to the foreshore were reported.

*Housing.*—During the year the Local Authority were able to resume house building and a start was made with the erection of twelve houses. Progress was inevitably slow. Approval was also given for the reconstruction of existing stables, &c., to form three houses and for a large property in the west end to be converted into two houses.

*Nuisances.*—There is nothing of a serious nature to report.

*Scavenging.*—Household refuse is removed by horse and cart being collected on alternate days from Elie and Earlsferry. The refuse is disposed of at the controlled tip, which is situated about



$1\frac{1}{2}$  miles to the north of the Burgh. A collection of waste paper continues to be made once a week.

*Factories and Workshops.*—The condition of these premises on inspection was generally found to be satisfactory.

*Milk Supply.*—There are no producers of milk within the Burgh. One “dry dairy” retails undesignated and Certified Milk. Designated milk is also available from three other retailers in the landward area.

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946:—

Erysipelas	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	1
Pulmonary Tuberculosis	...	...	...	...	1

The number of cases is remarkably small, and the complete absence of cases of diphtheria and scarlet fever is noteworthy.

#### Vital Statistics—Year 1948.

Births	...	...	...	...	...	18
Marriages	...	...	...	...	...	9
Deaths	...	...	...	...	...	17
Deaths of Infants under 1 Year	...	...	...	...	...	Nil

The main cause of death during the year was heart disease.

#### (14) Burgh of Pittenweem.

*Water Supply.*—Throughout the year the supply of water to the Burgh was satisfactory.

*Drainage.*—The sewerage system continued to function efficiently and no complaints of nuisances were received.

*Housing.*—Work was started in connection with the erection of 38 houses on a site to the east of the present Housing Scheme. The laying of water mains and sewers was well under way towards the end of the year.

*Nuisances.*—No complaints of a serious nature had to be dealt with during the year.

*Scavenging.*—The household refuse as previously reported is collected four times weekly and taken to the controlled tip situated at the north end of the town. With a view to minimising the amount of dust being discharged into the atmosphere the Council agreed that a detachable cover should be fitted to the present pen lorry. A weekly collection of wastepaper is still carried out.

*Factories and Workshops.*—The condition of these premises on inspection was generally found to be satisfactory.

*Milk Supply.*—There is one producer of designated milk in the Burgh. In addition, three other producers in the landward area retail milk in the Burgh, two of which deal in designated milk.



*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—

Diphtheria	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	2
Scarlet Fever	...	...	...	...	2
Pulmonary Tuberculosis	...	...	...	...	3

The incidence was low throughout the year and the figures call for no special comment.

#### **Vital Statistics—Year 1946.**

Births	...	...	...	...	39
Deaths	...	...	...	...	25
Marriages	...	...	...	...	13
Deaths of Infants under 1 Year	...	...	...	...	1

The main causes of death were—Heart disease 12, and cancer 4.

### **(15) Burgh of St Monance.**

*Water Supply.*—There was an adequate supply of water for all purposes and the quality was satisfactory.

*Drainage.*—The construction of a new 12-in. sewer from west of Station Road, alongside the existing 9-in. to the point of discharge, is at present under consideration. With the developing of housing westwards, and, bearing in mind the level of the ground another outfall sewer may eventually have to be laid.

*Housing.*—Work on the first instalment of 28 houses under the Post-War Housing programme was commenced during the year and up to the end fairly good progress was made. As previously reported the need of more houses is very urgent.

*Nuisances.*—No complaints were received nor was any action considered necessary.

*Scavenging.*—Towards the end of the year the Town Council decided to purchase a tractor and trailer to be used for the collection of household refuse, &c. This will replace the present open lorry which is now obsolete. The procuring of other suitable ground for disposal of the Burgh refuse has also received the attention of the Town Council. The available space at the present tip will all be taken up in the near future.

*Factories and Workshops.*—Visits were made to a number of these places, and conditions in most cases were found to be satisfactory.

*Milk Supply.*—Conditions have not changed through the year. There are no producers of milk within the Burgh. Five retailers supply milk from outwith the Burgh and two of these are licensed to sell designated milk.

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—

Diphtheria	...	...	...	...	1
Pulmonary Tuberculosis	...	...	...	...	2
Non-Pulmonary Tuberculosis	...	...	...	...	1
Paratyphoid Fever	...	...	...	...	1

The incidence during the year has been very low, the complete absence of scarlet fever being noteworthy.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	...	35
Marriages	...	...	...	...	...	7
Deaths	...	...	...	...	...	18
Deaths of Infants under 1 Year	...	...	...	...	...	1

The two main causes of death were—Cancer 5, and heart disease 5.

#### (16) Burgh of St Andrews.

*Water Supply.*—An ample supply of water was maintained throughout the year. Cameron Reservoir was at its top water level from 1st January to 17th February, from 5th to 27th March and from 21st November to the end of the year. Lambielemtham Reservoir was maintained between 31 feet 9 inches and 30 feet, and no work was undertaken on the leak in the dam. One secondary filter was completely emptied and new drainage pipes and filtering media put in.

*Mains, &c.*—In September 720 lineal yards of 4-inch diameter and 106 lineal yards of 6-inch diameter spun-iron pipes were laid in the 12th development of the housing schemes. These mains link up the new development with Lamond Drive at Sandyhill Road and Pipeland Road.

In November 300 lineal yards of 2-inch diameter asbestos pipe were laid as an extension to Easter Strathkinness Farm.

During December the main at Strathkinness High Road was extended 270 lineal yards by spun-iron pipes of 3-inch diameter.

Twenty-five  $\frac{3}{4}$ -inch connections were made to the mains during the year; 19 of these were for the permanent houses of the 12th development and 3 for the temporary houses of Warrack Street and Priestden Place.

During the year a complete water inspection of the whole town was made by the Water Inspector, resulting in the issue of 1,084 notices in respect of waste of water and defective fittings, and in a satisfactory reduction in the daily consumpt of water per head to winter figure of 68·5 gallons, the lowest figure recorded since 1938.

Dr Simpson, the Bacteriologist at the James Mackenzie Institute, left to take up another appointment in February, and arrangements were made for samples of water to be submitted to Professor Tulloch, Dundee. Samples were regularly submitted for examination and were found to be of good quality.

The following figures give some particulars regarding the amount of water consumed in the Burgh during the year :—

Average consumpt	per month ...	...	23,037,500	gallons	
"	"	per week ...	...	5,315,942	gallons
"	"	per day ...	...	757,340	gallons
"	"	per head per day	.	75.73	do.

The lowest consumption per head per day was in November (72·25 gallons) and the highest in July (82·33 gallons).

*Drainage.*—The sewerage system of the Burgh functioned satisfactorily during the year.

In December, 270 lineal yards of 9-inch fireclay pipe were laid as an extension of the sewer at Strathkinness High Road. The sewer now extends to the Burgh Boundary on this road.

Nine new connections were made to the sewers during the year.

*Housing.*—No official action was taken during the year in connection with the inspection, closure and demolition of unfit houses or in regard to overcrowding.

At the end of the year there were 471 local applicants for Municipal houses, and this number is being steadily increased.

A number of properties, which, but for the outbreak of war would have been surveyed, show a steady decline in their condition and at present little or nothing can be done to alleviate these conditions.

In common with all areas, the housing problem in the Burgh is acute, and although a scheme of 102 houses has been commenced it would appear that, at the present rate of progress, it will be some considerable time before the first of these houses will be ready for occupation.

The property known as "The Priory" was requisitioned and converted into three dwelling-houses of three apartments, and these are now occupied.

Applications approved by the Works Committee of the Town Council may be classified as under :—

Additions to University, School, and Public Buildings	...	4
Alterations to Business Premises	... ..	19
Alterations to Private Houses	... ..	37
New Houses	... ..	14
Miscellaneous	... ..	5
Total	...	79

The following houses were passed as fit for occupation during the year :—

Two apartment houses	... ..	1
Three apartment houses	... ..	3
Four apartment houses	... ..	2
Five apartment houses	... ..	1
Seven apartment houses	... ..	2
Total	... ..	9

*Nuisances.*—Seven verbal and four written complaints were received during the year regarding alleged nuisances. These were investigated, and it was found necessary to issue three “Intimations” in terms of Section 19 of the Public Health (Scotland) Act, 1897.

Numerous inspections were made for the detection of nuisances, and four verbal intimations were given with the desired effect.

It was not found necessary to issue any “Notices” under the Act.

*Scavenging and Cleansing.*—No alterations on the methods of street cleaning, refuse collection and disposal took place during the year, and no new streets were formed.

Tipping was continued at the West Sands, and no complaints were received regarding the operations.

*Factories and Workshops.*—Thirty-two visits of inspection were made to factories in the Burgh as follows:—

Factories with Mechanical Power...	...	22
Factories without Mechanical Power	...	6
Other Premises under the Act	...	4
Total	...	<u>32</u>

Four notices were received from H. M. Inspector of Factories and the necessary action was taken.

In company with Company Officer Hastie of the National Fire Service a number of premises in the Burgh were visited and inspected in terms of Section 34 of the Factories Act, 1937, and three Certificates as to means of escape in case of fire were issued by the Local Authority.

*Slaughter-house.*—The slaughter-house continues to be well maintained, and has at all times been found in a satisfactory condition.

During the year (15/1/46-15/1/47) 994 cattle, 5,489 sheep, 6 pigs, a total of 6,489 animals, were slaughtered and 21,111 lbs. of meat were condemned or destroyed. Pounds of meat condemned per head of cattle slaughtered amounted to 21·1 lbs.

*Milk Supply.*—The position as regards producers and retailers whether in or supplying milk to the Burgh remains unchanged from the previous report. On the whole, complaints regarding the keeping quality of milk in the Burgh during 1946 have been less frequent than in previous years. From the point of view of an incentive to good milk production, the desirability of a customer being able to choose his own supplier without formality or permission from anyone was pointed out in the previous report covering the war years. There appears to be little prospect of this being the case in the near future.

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—

Diphtheria	...	...	...	...	2
Erysipelas	...	...	...	...	2
Ophthalmia Neonatorum	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	6
Acute Primary Pneumonia	...	...	...	...	2
Other Pneumonias	...	...	...	...	2
Puerperal Fever	...	...	...	...	3
Scarlet Fever	...	...	...	...	13
Pulmonary Tuberculosis	...	...	...	...	15
Non-Pulmonary Tuberculosis	...	...	...	...	3
Total					49

The total cases are 9 less than in 1945, the decrease being mainly in pneumonia and pulmonary tuberculosis. There was, however, an increased incidence of scarlet fever cases (13) as against 2 in 1945. This increase was part of a general increase noticeable throughout north-east Fife during 1946.

#### **Vital Statistics—Year 1946.**

Births	...	...	...	...	171
Marriages	...	...	...	...	84
Deaths	...	...	...	...	135
Deaths of Infants under 1 Year	...	...	...	...	11

The three main causes of death were—Heart disease, cancer, and cerebral haemorrhage in that order.

#### **(17) Burgh of Tayport.**

*Drainage.*—No changes have been made in the drainage system during the year, and with periodic flushing as required the system continues to be satisfactory.

*Water Supply.*—The Burgh continues to receive its supply from Dundee Corporation.

*Housing.*—Following preliminary work commenced in December 1945, actual building was commenced at the Bobbin Mill site early in 1946. Forty-two traditional and 20 non-traditional houses were under construction by the end of the year but work has been much delayed by difficulties over labour and material. The position at the end of the year was :—

*Bobbin Mill Site.*—Ten blocks were erected and roofed, eight houses were occupied, and a further six were ready for occupation in a few weeks. This completes the Government allocation of traditional houses for the year. The other five blocks were in various stages of completion.

*20 Cruden Houses.*—Ten blocks were erected and roofed, and further three were ready for paintwork, and two houses were occupied. The remaining blocks were in different stages of completion.



*Glebe Site.*—Progress has been slow, and these houses were not completed by the end of the year.

*Tay Street Site.*—Of a total of 10 houses, six had reached the stage of being roofed.

*Cupar Road Site.*—Site preparation was commenced and tenders received for a first development of 24 houses. When the projected 92 houses at this site have been completed and an extension of the Shanwell Road (South) Site carried out, the housing position will be greatly improved, but before further ground is acquired, clearance of older houses in the lower part of the town should be undertaken.

The existing housing situation in the Burgh is serious, as is emphasised by the fact that there are approximately 300 applications for houses outstanding.

*Factories and Workshops.*—Adequate inspections have been carried out and, on the whole, general conditions are satisfactory. Any defects found have been remedied but some concern has been caused by the uncleanness of the lavatory accommodation in the two small foundries in the Burgh. Bakehouses were kept in a clean condition.

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during the year 1946 :—

Diphtheria	...	...	...	...	...	1
Erysipelas	...	...	...	...	...	1
Ophthalmia Neonatorum	...	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	...	1
Acute Primary Pneumonia	...	...	...	...	...	3
Pneumonia—other forms	...	...	...	...	...	6
Scarlet Fever	...	...	...	...	...	29
Pulmonary Tuberculosis	...	...	...	...	...	2

The total number of cases (49) was greatly in excess of the 25 cases notified in 1945. This was mainly accounted for by the increase in cases of scarlet fever, 29 in 1946 as compared with 10 in 1945. The increase in scarlet fever cases was not confined to Tayport but was fairly general in the north-east of Fife.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	...	57
Marriages	...	...	...	...	...	31
Deaths	...	...	...	...	...	51
Deaths of Infants under one Year	...	...	...	...	...	6

The main causes of death were—Heart disease 20, cerebral haemorrhage 5, cancer 4, pneumonia 3.

#### (18) Burgh of Newport.

*Water Supply and Drainage.*—The Water Authority for the Burgh is the Corporation of Dundee, and the Burgh Surveyor's Department has no responsibilities in connection with the supply.

The supply was plentiful and of good quality during 1946. The drainage system in the Burgh is in a satisfactory condition, the only works carried out being periodical flushing of the sewerage system and minor repairs to outfalls.

*Housing.*—The Burgh is in a much more fortunate position as regards housing than most other Burghs in the County, in that in 1938 appropriate action was possible and had been undertaken under the Housing (Scotland) Act, 1930, to deal with all unfit houses except two occupied by elderly tenants. While the "Appointed Day" under the Act was fixed by the Department of Health as 1st July, 1939, the housing position during 1946 has not been such as to allow overcrowding to be dealt with under the statutory regulations applicable to a Burgh for which an appointed day has been fixed. In addition to unavoidable overcrowding, houses which in 1939 were passed by or considered borderline cases under the Housing Acts have by the end of 1946 suffered neglect and have further deteriorated. Appropriate action in such cases will not be possible until sufficient new houses have been completed or until the supply position permits of improvement to existing properties.

During 1946, 16 temporary houses of the Orlit type commenced in 1945 were completed and occupied during September and October. At the beginning of the year a start was made with 8 permanent houses of the cottage type to complete the Flass Road Scheme, but progress has been slow. The Town Council have acquired 7½ acres of ground at Craighead for housing purposes. Layout plans for 44 houses have been approved, and offers for building work are being received. Site preparation work is proceeding satisfactorily.

*Nuisances.*—Complaints have been few. Sixteen were received and investigated during 1946.

*Scavenging and Cleansing.*—The Sanitary Inspector states that nothing calls for special comment as regards scavenging arrangements. As regards cleansing, a weekly collection operates in the Burgh, except for a small area of tenement property where a twice weekly collection was made. During 1946, 672 motor loads and 102 cart loads of refuse were dealt with in addition to 93 loads of garden refuse. All refuse is dealt with by controlled tipping at two coups, one beyond the east boundary of the Burgh and one at Wormit. These are well maintained and rat infestation is under control.

*Factories and Workshops.*—The number of factories registered is as follows :—

Factories with Mechanical Power	...	7
Factories without Mechanical Power	...	10

The Sanitary Inspector reports that periodic inspections were carried out and that conditions were generally satisfactory.

*Milk Supply.*—Supplies of T.T. Milk and of Pasteurised Milk are available to the public from retailers in the Burgh. There are no producers' premises within the Burgh.

*Infectious Disease.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—

Dysentery	...	...	...	...	...	1
Erysipelas	...	...	...	...	...	2
Acute Influenzal Pneumonia	...	...	...	...	...	2
Acute Primary Pneumonia	...	...	...	...	...	3
Scarlet Fever	...	...	...	...	...	7
Pulmonary Tuberculosis	...	...	...	...	...	1
Non-Pulmonary Tuberculosis	...	...	...	...	...	2

The total number of cases (18) is five less than the number notified in 1945. The number of cases of scarlet fever, though more than the number in 1945, is less than might have been expected from the increased general incidence of the disease in the north-east of Fife during 1946.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	...	56
Marriages	...	...	...	...	...	25
Deaths	...	...	...	...	...	46
Deaths of Infants under 1 Year	...	...	...	...	...	2

The main causes of death were—Heart disease, cancer, and cerebral haemorrhage.

#### (19) Burgh of Auchtermuchty.

*Water Supply.*—The quantity of water available from the sources Glassart Burn and at Leckiebank have a presumptive yield of 55,000 gallons per day. The actual consumption per head of population in the Burgh cannot, however, be assessed as there is no means of assessing the actual amount of water passing into the Burgh. During the year shortage has been experienced in the higher parts of the town. Mr Mark, Sanitary Inspector, in his report points out that this is contributed to by the unbalance in pipe diameters from the Glassart filters.

A new 5-in. main has been laid in the vicinity of the Lochybank area and a new 3-in. main has been laid to the middle flat. These have improved the supply to both places. The filters have been maintained in a satisfactory state and no complaints have been received regarding the quality of the water supply.

*Drainage and Sewage Disposal.*—The sewage purification plant of modern design and has been maintained in good order.

*Housing.*—The site at Lochybank will accommodate 56 houses and contracts have been settled for the erection of 12 houses. They consist of two of the bungalow type, six semi-detached, and four detached cottage type. Owing to the delay in delivery of the 15 temporary houses allocated to the Burgh, this was changed to 10 prefabricated permanent Cruden houses.

The total number of houses under construction is therefore twenty-two. Whether these will be ready for occupation during the coming year will depend on the availability of material. In order to facilitate a fair allocation of new houses to tenants a points system has been introduced, with a reservation that the Town Council may deal with exceptional cases where necessary at their discretion.

The standard recommended by the Secretary of State in 1944 for house occupation was two persons per bedroom irrespective of age. Under this higher standard a considerable proportion of existing Council houses are now overcrowded. Allowance for this would require to be made under any future decision as to the number of houses to be built.

*Nuisances.*—Nothing of outstanding nature falls to be reported.

*Scavenging.*—Refuse collected by contract is removed to a site at Rossie Den. A further section of ground has been taken in and dumping should now be concentrated there, and the opportunity taken of covering the face of the dump at the south end with suitable material.

*Factories and Workshops.*—In the Burgh are 13 factories with mechanical power and 8 without. They have been regularly visited by the Sanitary Inspector and any defects brought to the notice of those responsible.

*Milk Supply.*—No change as regards arrangements in the Burgh has occurred. There is one milk retailer in the Burgh, and a milk retailed in the Burgh comes from farms situated in the landward area of the County, which are under the supervision of the County Council Officials.

*Infectious Diseases.*—The following number of cases of infectious disease were notified in the Burgh during 1946 :—

Acute Primary Pneumonia	...	...	1
Pulmonary Tuberculosis	...	...	2

The number of cases is remarkably few. The complete absence of cases of scarlet fever and diphtheria is especially noteworthy.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	...	27
Marriages	...	...	...	...	...	9
Deaths	...	...	...	...	...	19
Deaths of Infants under 1 Year	...	...	...	...	...	1

The three main causes of death were—Heart disease 9, pulmonary tuberculosis 2, congenital debility, premature birth, &c., 2.

#### (20) Burgh of Cupar (Transferred Services).

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—



Diphtheria	...	...	...	...	3
Erysipelas	...	...	...	...	5
Ophthalmia Neonatorum	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	3
Acute Primary Pneumonia	...	...	...	...	12
Puerperal Fever	...	...	...	...	1
Puerperal Pyrexia	...	...	...	...	1
Scarlet Fever	...	...	...	...	8
Pulmonary Tuberculosis	...	...	...	...	4
Non-Pulmonary Tuberculosis	...	...	...	...	2

The total number of cases in 1946 was 40, compared with 46 in 1945. The 8 cases of scarlet fever were much fewer than the 21 cases notified in 1945.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	109
Deaths	...	...	...	...	80
Marriages	...	...	...	...	77
Deaths of Infants under 1 Year	...	...	...	...	10

The main causes of death were—Heart disease 26, cerebral haemorrhage 10, cancer 10, pneumonia 5. The number of deaths of infants under one year compares unfavourably with the number during the years 1939-45.

#### (21) Burgh of Falkland (Transferred Services).

*Infectious Diseases.*—The following table shows the incidence of infectious disease in the Burgh during 1946 :—

Scarlet Fever	...	...	...	...	5
Pulmonary Tuberculosis	...	...	...	...	4
Non-Pulmonary Tuberculosis	...	...	...	...	1

During 1945 a total of 5 cases of infectious disease were notified. The increase to 10 during 1946 is mainly due to the appearance of scarlet fever, no cases of this disease having been notified during 1945.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	15
Marriages	...	...	...	...	9
Deaths	...	...	...	...	18
Deaths of Infants under 1 Year	...	...	...	...	2

#### (22) Burgh of Ladybank (Transferred Services).

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during 1946 :—

Acute Influenzal Pneumonia	...	...	...	...	1
Puerperal Pyrexia	...	...	...	...	1
Scarlet Fever	...	...	...	...	4

The incidence has been low and calls for no special comment.

#### Vital Statistics—Year 1946.

Births	...	...	...	...	28
Marriages	...	...	...	...	8
Deaths	...	...	...	...	17
Deaths of Infants under 1 Year	...	...	...	...	1

The main causes of death were—Heart disease 5, cerebral haemorrhage 3.



## (23) Burgh of Newburgh (Transferred Services).

*Infectious Diseases.*—The following table shows the number of cases of infectious disease notified in the Burgh during the year 1946 :—

Erysipelas	...	...	...	...	3
Ophthalmia Neonatorum	...	...	...	...	1
Acute Influenzal Pneumonia	...	...	...	...	2
Acute Primary Pneumonia	...	...	...	...	6
Scarlet Fever	...	...	...	...	1
Pulmonary Tuberculosis	...	...	...	...	2

The total number of cases (15) is considerably less than the 27 notified during 1945, the difference in the main being due to the absence of cases of dysentery in 1946.

**Vital Statistics—Year 1946.**

Births	...	...	...	...	...	40
Marriages	...	...	...	...	...	31
Deaths	...	...	...	...	...	16
Deaths of Infants under 1 Year	...	...	...	...	...	3

The main causes of death were—Heart disease 10, cerebral haemorrhage 6, and cancer 10.

## EXAMINATION AND CERTIFICATION OF BLIND PERSONS.

The examination of persons applying for certification as "blind persons" was continued, at a number of clinics in the County—Dunfermline Hospital, Lochgelly (Welfare Clinic), Kirkcaldy Glebe Park Clinic), Methil (Welfare Clinic), and St Andrews. These examinations were made by the two Eye Specialists—Dr Allister MacGillivray and Dr Leeds.

The total number of persons examined was 54 (this number included 19 re-examinations). The distribution as between the County and the two Large Burghs was:—County 36, Kirkcaldy Burgh 15, and Dunfermline Burgh 3. The results of the examination are as follows:—

	Clinic Cases.		Bedridden Cases.		Total.	
	Blind.	Not Blind.	Blind.	Not Blind.	Blind.	Not Blind.
County ... ..	13	9	11	3	24	12
Kirkcaldy Burgh ...	9	—	4	2	13	2
Dunfermline Burgh	2	1	—	—	2	1
Total ... ..	24	10	15	5	39	15

In addition to certifying the patients as "blind" or "not blind" the ophthalmologists recommend treatment. The treatment recommended by them is summarised in the following table:—

### Type of Treatment Recommended.

	Blind.		Not Blind.		Total.
Medical ... ..	3	—	—	—	3
Surgical ... ..	9	3	—	—	12
Optical ... ..	1	4	—	—	5
	13	7	—	—	20

The following primary eye conditions were recorded by the eye specialists:—Primary and senile cataract 22; choroidal retinal degeneration 4; myopia with degenerative (choroidal) changes 4; optic nerve atrophy 5; keratitis 4; choroiditis 4; primary glaucoma 2; simple myopia 4; trauma 3; retinitis 1; congenital cataract 1. It will be seen that the bulk of the cases showed degenerative changes, and about 29 were recorded as suffering from cataractous changes in the lenses of the eyes. This is not to be wondered at in view of the ages of the persons examined. There were 35 (19 men and 16 women) over the age of 65, and 19 were between the ages of 40 and 65.

Attention has already been drawn to the increasing number of old people examined, very often for the first time, who are found to have an eye condition too advanced for anything to be done. Drs Marshall and Seiler in a paper on a statistical analysis of over 3,000

blind persons came to the conclusion that in more than half the cases of blindness due to senile cataract covered by their investigation, "there was still a possibility of restoration of vision by operation." There being such a preponderance of old people among the Fife cases it is very doubtful whether 50 per cent. of the total could benefit from operative treatment even if they agreed to have such treatment. Too many of the cases have other disabilities, such as diabetes, high blood pressure, and renal complications which prevent the carrying out of operative treatment. The main object of these examinations is to institute special education or training for young persons, and to ameliorate the eye condition in the older people by appropriate treatment. A large proportion of the cases examined in Fife require nursing and social care for which special examination and certification is unnecessary.